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GOVERNMENT OF INDIA

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SOCIAL SERVICES

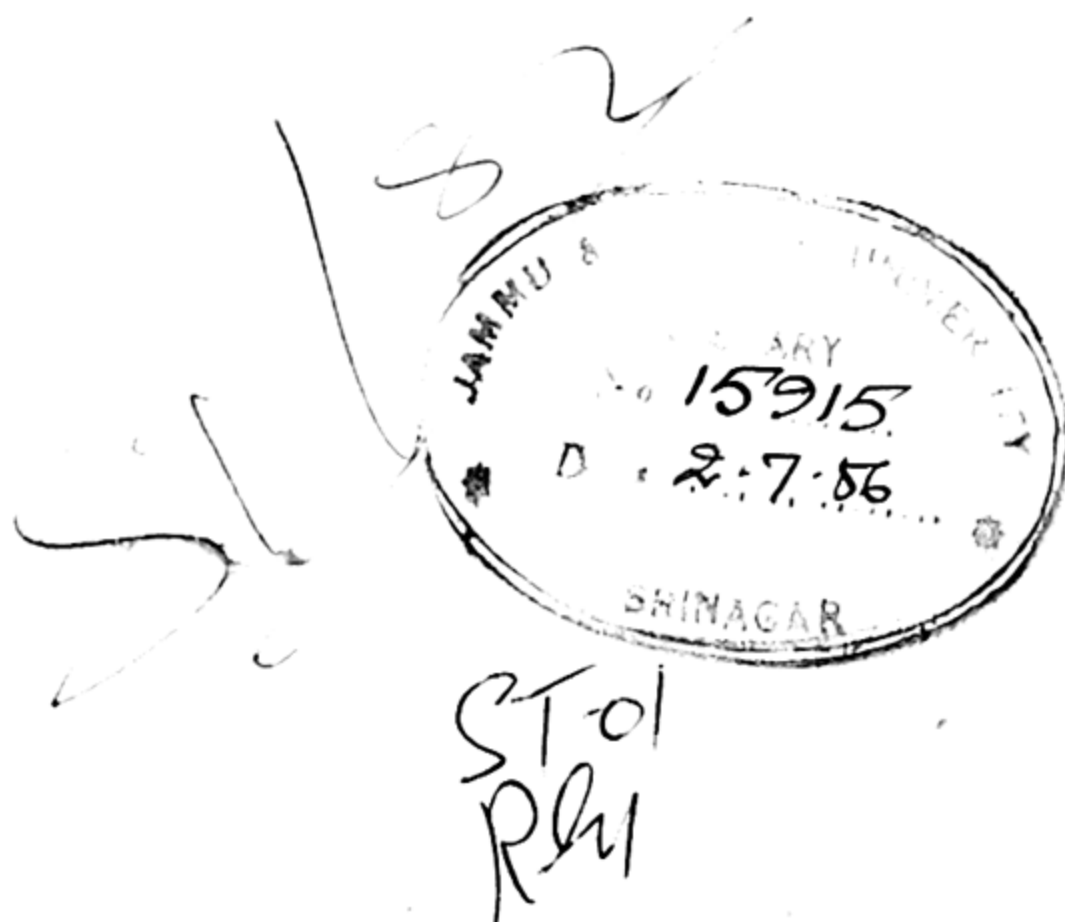
PLANNING COMMISSION

GOVERNMENT OF INDIA

SOCIAL SERVICES

PLANNING COMMISSION

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Explanatory Note

The expression 'lakh' and 'crore', which are frequently used signify 100,000 and 10 million respectively.

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INTRODUCTION

With the object of assisting study and implementation, the First Five Year Plan is being made available in the following sections:

- I. The Problem of Economic Development.
- II. Administration and Public Co-operation.
- III. Agriculture and Community Development.
- IV. Village and Small-Scale Industries.
- V. Irrigation and Power.
- VI. Development of Mineral Resources.
- VII. Industry and Communications.
- VIII. Social Services.

The numbering of pages in the different sections is in accordance with the text of the Plan.

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PART VIII

SOCIAL SERVICES

CHAPTER XXXII

HEALTH

Health is fundamental to national progress in any sphere. In terms of resources for economic development, nothing can be considered of higher importance than the health of the people which is a measure of their energy and capacity as well as of the potential of man-hours for productive work in relation to the total number of persons maintained by the nation. For the efficiency of industry and of agriculture, the health of the worker is an essential consideration.

2. Health is a positive state of well being in which the harmonious development of physical and mental capacities of the individual lead to the enjoyment of a rich and full life. It is not a negative state of mere absence of disease. Health further implies complete adjustment of the individual to his total environment, physical and social. Health involves primarily the application of medical science for the benefit of the individual and of society. But many other factors, social, economic and educational have an intimate bearing on the health of the community. Health is thus a vital part of a concurrent and integrated programme of development of all aspects of community life.

STATE OF PUBLIC HEALTH

3. Statistics of positive health are difficult to obtain. Information in regard to morbidity is available only to a limited extent. We have, therefore, to rely mainly on mortality statistics in assessing the state of public health. Compared with other countries, the expectation of life at birth in India is low as the following statement would indicate:

Country	Death rate per mille (1950)	Infantile mortality per 1000 live births	Expectation of life at birth		Year
			Males	Females	
United States of America .	9.6	29	Negroes		
			47.55	49.51	1920-21
			52.26 [†]	55.56	1939-41
			57.90	61.90	1947
			Whites		
			59.12	62.67	1929-31
England and Wales . .	11.6	30	62.81	67.29	1939-41
			65.20	70.50	1947
			51.50	55.35	1910-12
			55.62	59.58	1920-22
			58.74	62.88	1930-32
			66.39	71.15	1948
India . . .	16.5	127	23.63	23.96	1891-1901
			22.59	23.31	1901-1911
			26.91	26.56	1921-1930
			32.09	31.37	1941
			32.45	31.66	1951*

*Estimated on insufficient data.

Statistics relating to the expectation of life indicate a low level of health in the country because they express in terms of the average length of life the cumulative effect of the specific mortality rates at different ages in respect of the two sexes. The level of health as indicated by the death rate and the infantile mortality rate is low. The specially vulnerable groups in any community are children and women at the reproductive age groups and old people. Nearly 40 per cent of the total deaths are among children under 10 years of age and of the mortality in this age group half takes place within the first year of life. The percentage for England and Wales in every age group is very much smaller.

Deaths at specific age periods shown as percentage of total deaths at all ages : child mortality.

Country	Under 1 year	Percent- age of total	1-5 years	Percent- age of total	5-10 years	Percent- age of total	Total deaths of all ages
India, 1949 .	8,30,270	20.5	6,39,616	15.8	2,28,265	5.6	40,44,425
England and Wales, 1949.	23,882	4.7	4,641	0.9	2,045	0.4	5,09,973

Maternal mortality is estimated to be 20 per thousand live-births which is a very high figure. About 2 lakhs maternal deaths occur annually. The morbidity resulting from causes associated with child bearing would run to about 20 times this figure or 4 millions. The average annual number of deaths in India during 1940-49 from epidemic diseases and certain groups of causes is shown below:—

	Mean 1940-49	Percent- age of total deaths
Cholera]	2,02,857	3.5
Smallpox	71,008	1.2
Plague .	25,375	0.4
Fevers .	33,13,146	57.5
Dysentery and diarrhoea.	2,27,850	4.0
Respiratory diseases	4,15,345	7.2
All other causes	15,08,446	26.2
TOTAL	67,64,027	100.0

Epidemic diseases together account for 5.1 per cent of the total mortality. India continues to be the largest reservoir of these epidemic diseases. More than half the deaths are recorded under fevers by the reporting agency which has no means of proper diagnosis of the

cause of death. Respiratory diseases are numerically the next important group. There is a large prevalence of bowel disorders and parasitic infections. It is estimated that 100 million people suffer from malaria and the annual mortality is estimated at about 1 million. It is similarly estimated that about 2.5 million active cases of tuberculosis exist and about 500,000 deaths take place every year. The present low state of public health is reflected in the wide prevalence of disease and the high rate of mortality in the community as a whole and in particular among vulnerable groups such as children and women in their reproductive age period. A large part of this represents preventable mortality.

4. The output of the industrial worker in India is low compared with that of the worker in other countries. The productive capacity of the agricultural worker is comparatively low. The loss caused by morbidity in working time is enormous. To this must be added the expenditure to the individual and to the State in the provision of medical care.

CAUSES OF LOW STATE OF HEALTH

5. The causes of this low state of health are many. The lack of hygienic environment conducive to healthful living, low resistance which is primarily due to lack of adequate diet and poor nutrition, lack of proper housing, safe water supply, proper removal of human wastes and the lack of medical care, curative and preventive, are some of the more important factors, besides lack of general and health education and low economic status. These are serious impediments to rapid progress. The country's financial resources are limited, trained personnel are lacking and the whole programme of health development is bound up with a broader programme of social improvement.

PERSONNEL

6. One of the serious difficulties to be overcome is the shortage of personnel. This is clearly brought out in the following table :—

*The] Proportion of Medical Personnel to Population****

Medical Personnel									India	United Kingdom
1½ Doctor	.	.	.	.	.	.	.	.	6,300*	1,000
1 Nurse	.	.	.	.	.	.	.	.	43,000	300
1 Health visitor	.	.	.	.	.	.	.	.	4,00,000	4,710
1 Midwife	.	.	.	.	.	.	.	.	60,000	618
1 Dentist	.	.	.	.	.	.	.	.	3,00,000	2,700
1 Pharmacist	.	.	.	.	.	.	.	.	40,00,000 to 3 doctors.	

*75 per cent. of doctors are in urban areas and their distribution in rural areas is very sparse.

***Report of the Health Survey and Development Committee.

Increased training facilities for all these types of personnel are a matter of vital importance. In many areas the use of sub-professional auxiliary personnel is clearly indicated as an approach to a solution of the problem. It is of the greatest importance that the work of sub-professional personnel should be guided and supervised by qualified persons.

PHYSICAL FACILITIES

7. "Curative medicine of an effective scientific type must rest on good hospital facilities as its basis and preventive medicine must depend in a large measure on out-patient services for the ambulant case and on centres for health promotion through individual instruction in the principles of personal hygiene." * The number of medical institutions at present available is far too small to provide a reasonable standard of medical service to the people, particularly in the rural areas. While there is a considerable disparity between the States in the ratio of institutions to population in respect of both urban and rural areas, the average for the country is one institution for 24,000 urban population and one for 50,000 rural population in 1949.

The ratio of bed accommodation available in these institutions is one bed for 3,135 of the population or 0.32 bed per thousand in 1949. "More hospital facilities are needed but the hospital services which do exist need to be developed in the most economical manner (consonant with high standards), intra-mural care needs to be correlated with clinical and home care, effective integration with the public health programme as a whole must be secured and hospitals must become health centres in the full sense of the term."*

PRIORITIES

8. In the circumstances, a programme with the following priorities may form the basis of the plan:—

- (i) Provision of water-supply and sanitation.
- (ii) Control of malaria.
- (iii) Preventive health care of the rural population through health units and mobile units.
- (iv) Health services for mothers and children.
- (v) Education and training, and health education.
- (vi) Self-sufficiency in drugs and equipment.
- (vii) Family planning and population control.

ORGANISATION AND ADMINISTRATION

9. The pattern of development has been suggested by the Health Survey and Development Committee. It is to consist of peripheral primary health units catering to both preventive and curative care of the people with secondary health units and district units providing better and more complete facilities and supervision. The development of the primary and secondary health units is of the greatest importance in providing broad-based health services to the

community. Such centres are proposed in connection with the community development projects contemplated under the T.C.A. programme. They provide water supply and sanitary improvements, personal health services, particularly for mothers and children and health education to the public so that they may participate in the programme of development. A progressive spread of these institutions on a countrywide scale in a given number of years would go a long way in meeting the health needs of our rural population. In addition, it is necessary to convert some of the existing dispensaries into primary health units by the addition of necessary bed accommodation and preventive health staff. A definite number of such dispensaries may be converted each year according to a well-laid programme. Mobile dispensaries will have to be associated with these rural health units in order to take medical care to the population. The mobile dispensaries can also be utilised for carrying specialist services to the rural population.

10. Though health is largely the responsibility of the States, the Central Government are responsible, among other subjects, for higher education and research. The Central Government have also the overall function of the development of health services in the country as a whole. In order to develop the closest co-operation between the Centre and the States a Central Health Council has been constituted with the Central Minister of Health as chairman and the Ministers of Health of the States as members. Measures have to be devised to meet the needs of certain States for trained and experienced personnel for teaching, research and administration. There is an insistent demand for ensuring adequate health services for the vast rural population of the country.

MEDICAL AND PUBLIC HEALTH PROGRAMMES

11. The provision for the medical and public health plans of the Central and State Governments amounts to Rs. 99.55 crores of which the Centre's share is about Rs. 17.87 crores. Medical and public health measures being primarily States' subjects, the Central Government have limited their activities to higher education and research and aiding the State Governments in specific schemes such as control of malaria on a national scale. The following table gives the distribution of expenditure on medical and public health schemes in the plan:—

				(Rupees in lakhs)		
				Medical	Public health	Total
Central Government	.	.	.	565.23	1222.20	1787.43
Part 'A' States	.	.	.	3394.30	2956.00	6350.30
Part 'B' States	.	.	.	580.70	657.40	1238.10
Jammu and Kashmir	.	.	.	46.00	82.20	128.20
Part 'C' States	.	.	.	222.50	228.00	450.50
TOTAL				4808.73	5145.80	9954.53

The total amount of Rs. 99.55 crores shown above is not all that will be spent for medical and public health measures in the country. Local authorities in all the States are executing medical and public health programmes. International agencies like the W.H.O. and the U.N.I.C.E.F. are taking part in the development of medical and public health schemes in various parts of the country.

The total expenditure of the Central Government during 1950-51 was nearly Rs. 1 crore of which Rs. 7.5 lakhs has been reckoned as development expenditure. Though a number of schemes have been formulated in the past only very few of them and that too on a very modest scale could be taken up by the Central Government. This development expenditure of Rs. 7.5 lakhs is expected to be increased to an annual average of Rs. 3.57 crores during the next five years. The bulk of the plan is accounted for by (1) the All India Medical Institute, a central institution for higher research and post-graduate studies, estimated to cost Rs. 3.59 crores and (2) the National Malaria Scheme estimated to cost Rs. 10 crores. Though the malaria scheme is a Central scheme the beneficiaries will be the States.

In the medical plans of the States, Rs. 35.69 crores will be on Revenue account and Rs. 6.72 crores on Capital account. Of the amount of Rs. 42.41 crores to be spent on medical schemes, Rs. 33 crores will be on schemes in progress. But in the public health programme of the total expenditure of Rs. 39.23 crores Rs. 17 crores will be on schemes in progress, the balance on new schemes. This is mainly because a number of new items of water supply and drainage works is being undertaken in various States under the plan.

12. The following table gives the proportion of the increase contemplated under the plan on medical and public health expenditure in the States over that in 1950-51.

(Rupees in lakhs)

States	Medical			Public Health		
	Develop- ment expendi- ture 1950-51	Average annual expendi- ture in the Plan	Percen- tage of increase	Develop- ment expendi- ture 1950-51	Average annual expenditure in the Plan	Percen- tage of increase
Part 'A'	525.31	678.86	29.2	316.57	591.2	86.9
Part 'B'	78.66	116.14	47.9	51.48	131.4	55.4
Part 'C'	1.48	44.52	2908.0	1.12	45.60	3970.0

The proportion of increase for both medical and public health for Part 'A' States appears comparatively low because the level of development expenditure in 1950-51 had already increased very considerably in the period 1946-47 to 1950-51 on account of the undertaking of post-war reconstruction schemes. Perhaps the small proportion for medical schemes in the case of Part 'B' States is also attributable to the level already attained in 1950-51 on account of the operation of the post-war reconstruction plans in States like Hyderabad, Mysore, Travancore & Cochin, Gwalior and Jaipur. The proportion appears phenomenal in the case of Part 'C' States because such services on a large scale are almost new fields of effort.

The comparatively larger proportion of increase contemplated under public health measures in all the States over that for medical programmes indicates the greater importance attached to public health measures by the State authorities. This shift in emphasis is in the right direction.

13. The following table indicates the expenditure on various categories of medical schemes undertaken by both the Central and State Governments (excluding Jammu and Kashmir State) as compared with the position obtaining in 1950-51 :—

							(Rupees in lakhs)		
							1950-51	5 years' total	Annual average
Administration	.	.	.	.	.	.	3.2	62.2	12.4
Education and training	.	.	.	.	.	.	235.2	1891.7	378.3
Hospitals and dispensaries	.	.	.	.	.	.	331.3	2486.7	497.4
Other schemes	.	.	.	.	.	.	43.3	322.1	64.5
TOTAL							613.0	4762.7	952.5

Out of the total expenditure contemplated, more than 50 per cent will be on hospitals and dispensaries and nearly 40 per cent of the total provision will be for medical education and training. It will be seen from the table above that the proportion of the distribution of the total expenditure under the Plan amongst the various categories of schemes will be almost the same as that obtaining in 1950-51 as a majority of the schemes in the States' sector continues from 1950-51 onwards.

Schemes for medical education and training relate, in addition to the Central All India Medical Institute, to the completion of the new medical colleges in Assam, at Poona, Ahmedabad and Baroda in Bombay, at Guntur and Madura in Madras, in Madhya Pradesh, West Bengal and Travancore-Cochin, expansion of existing medical schools and colleges and provision of training for auxiliary medical personnel like nurses, midwives, compounders, etc. The execution of the schemes is expected to increase the total number of personnel trained annually in the country during the period 1951-52 to 1955-56, as follows :—

Number trained							During 1950-51	Ending 1955-56	Percentage of increase
Doctors	.	.	.	.	.	.	2504	2782	11.1
Compounders	.	.	.	.	.	.	894	1621	81.3
Nurses	.	.	.	.	.	.	2212	3000	35.6
Midwives	.	.	.	.	.	.	1407	1932	37.3
Vaids and Hakims	.	.	.	.	.	.	914	1117	22.2

Schemes regarding hospitals and dispensaries relate to the construction of a few new hospitals and dispensaries, expansion of existing ones with increase in the number of beds, provincialisation of hospitals and dispensaries hitherto under non-government agencies and provision of mobile dispensaries for rural areas. The increase in the number of hospitals and dispensaries and the number of beds in them is anticipated to be as follows :—

	During 1950-51	By 1955-56	Percen- tage of increase
Number of hospitals	2014	2062	2.4
Number of dispensaries (urban)	1358	1695	24.8
Number of dispensaries (rural)	5229	5840	11.6
Number of beds in hospitals	106478	117222	10.1
Number of beds in dispensaries (urban)	2013	2233	11.4
Number of beds in dispensaries (rural)	5066	5582	10.2

Other schemes under the head relate to the opening of a number of T.B. clinics and sanatoria in almost all the States, opening of leprosy clinics and hospitals in a majority of States where the disease is prevalent and provision for the prevention and treatment of venereal diseases.

14. The following table gives the expenditure on different categories of public health schemes undertaken by the Central and State Governments (excluding Jammu and Kashmir) as compared with such expenditure in 1950-51 :—

	(Rupees in lakhs)		
	1950-51	5 years' total	Annual average
Administration	15.6	210.8	42.2
Education	1.0	130.7	26.1
Water supply and drainage	270.5	2334.4	466.9
Anti-malaria	45.4	1715.2	343.0
Other schemes	35.5	672.5	134.5
	268.0	5063.6	1012.7

It will be seen that water supply and drainage and anti-malaria schemes account for the bulk of the expenditure. The development expenditure in 1950-51 will increase by nearly four times every year in the plan period. The rate of annual expenditure on water supply and drainage will increase by more than 70 per cent and the rate of expenditure on anti-malaria operations will be increased by more than 750 per cent.

Under public health education, provision has been made in certain States for training of medical graduates in public health, training of health visitors, sanitary inspectors, etc. The number of sanitary inspectors trained annually is expected to increase from 346 in 1950-51 to 450 by the end of 1955-56

Water supply and drainage works under the public health plan comprise mostly measures for improving drinking water supply, the provision for urban and rural areas being Rs. 12.12 and Rs. 11.37 crores respectively. Madras and Bombay account for a major share of the programme.

Anti-malaria operations comprise expansion of the Central Malaria Institute, large-scale spraying of D. D. T. and distribution of anti-malaria drugs by the State Governments. The State Governments' activities would be augmented by large supplies of D.D.T. produced by the Central Government's D.D.T. plants to be established shortly and also the supplies of D.D.T. and anti-malarials from the United States of America under the Technical Co-operation Agreement.

Other schemes under the head relate to the establishment of primary health centres in some of the States, establishment of maternity and child welfare centres, the most important being the Central Government's scheme for child health care at Calcutta, and provision for nutrition research in certain States like Madras, Bombay, Uttar Pradesh and Assam. The Central Government are providing for a number of mobile health units in the rural areas of several Part 'C' States.

ENVIRONMENTAL HYGIENE

15. The provision of an environment conducive to healthful living is an essential requirement for the maintenance of public health. In countries where water supplies and waste disposal have been attended to cholera, typhoid fever and dysentery have almost disappeared and rare cases occur due to personal contact or food handling by healthy carriers. These measures have also their effect on the infant mortality rate and the intestinal parasitic infection rate. In India these problems largely remain to be solved.

WATER SUPPLY

16. The provision of a safe and adequate water supply is a basic requirement and should receive the highest priority. Though the provision of protected water supplies was started in India about the same time as in England and U.S.A., the progress made has been little. Only 6 per cent of the total number of towns in India have protected water supplies which serve 6.15 per cent of the total population or 48.5 per cent of the urban population. The position of the water supplies has deteriorated considerably in the larger towns. In the rural areas and small urban areas, the water supply continues to be unsatisfactory. The Environmental Hygiene Committee proposed a Five-Year Plan based on certain priorities like water scarcity, cholera endemicity, pilgrim centres, intensive development projects, etc. The scheme as suggested by the Committee would cost about Rs. 16.77 crores per annum.

17. The introduction of protected water supply alone will not be sufficient for achieving healthful living. It is also essential to adopt measures for the hygienic collection and disposal of community wastes. Only 23 cities out of 48 having a population of over 1 lakh have

sewerage systems. There are 12 other towns which are partially sewered. About 3 per cent of the total population is now served by sewerage systems. A five-year programme has been suggested by the Environmental Hygiene Committee. The total outlay required for this programme may be about Rs. 15 crores in five years.

18. While it has not been possible to make a provision on this scale in the plan, it would be seen that a substantial effort is being made by the States. Among Part 'A' States Bombay, Madras, West Bengal and Bihar, among Part 'B' States Rajasthan, Madhya Bharat, Mysore and Travancore-Cochin and among Part 'C' States Bhopal, Vindhya Pradesh, Himachal Pradesh and Manipur have devoted considerable sums for water supply and drainage improvements. The five-year programme of water supply and drainage works of the States provides Rs. 23.49 crores.

Out of the total provision, Rs. 12.12 crores is for urban water supply and drainage and Rs. 11.37 crores for rural water supply. States have, as in the case of Madras, set up Commissions to determine priorities of water supply and drainage schemes over a long term and have made their five-year plans to fit in with such programmes. Governments help the local authorities to take up the schemes in the order of priority giving grants-in-aid and loans.

19. In rural areas, States aim at providing simple types of safe water supply for almost all villages within a certain period. In Madras, for example, a special fund with an initial contribution of Rs. one crore for the development of rural water supply has been constituted. The fund is supplemented by a grant of Rs. 15 lakhs annually. In the Five Year Plan of the Central Government there is a provision of Rs. 30.00 crores for local development loans for assisting local authorities. About Rs. 10.0 crores out of this may be assumed to be available for water supplies. Contribution by the people by way of voluntary labour or money will enable the provision to go a long way in the improvement of water supplies.

20. Just as in the case of rural water supplies, rural sanitation requires a special emphasis. Hardly 5 per cent of the houses have latrines. Simple types of latrines which require no special servicing have been found suitable. The State Governments can offer technical service and some inducement like supply of water-seal squatting slabs on a subsidised basis. The aim is to provide latrines in each house and only an absolute minimum in the way of public sanitary conveniences. The education of the individual in sanitary habits is deemed far more important.

21. A large part of the investment in water supplies and sewage systems will go towards the provision of pipes and the stepping up of production of materials required is one of the important considerations to be kept in mind.

22. For the implementation of the programme, it is essential to organise public health engineering services on a strong and sound basis in order to design, execute and maintain water supply and drainage works. All part 'A' States except Assam have a public health engineering organisation. Most of the part 'B' States also have a public health engineering set up, while part 'C' States have none. The services of a public health engineering consultant have been obtained from the United States of America for a period of one year by the Central Government.

NUTRITION

23. Nutrition is perhaps the most important single factor in the maintenance of health and resistance to disease. The state of nutrition has a direct bearing on the productive capacity of an individual. Several studies carried out in different parts of the world give a direct correlation between calorie consumption and accomplishment of workers. There is reason to believe that both under-nutrition and mal-nutrition exist widely in the country.

24. The availability of cereals in 1950 was about 13.71 oz. per adult per day taking into account the internal production, imports and offtake from carry-over of stocks. The availability of gram and pulses was about 2.1 oz. per adult per day. Thus the availability of cereals as well as pulses was below the nutritional standards of 14 oz. and 3 oz. respectively. The plan aims at the production of 7.6 million tons of foodgrains with a view to make internal production self-sufficient in 1955-56. A satisfactory diet should include, in addition to foodgrains, adequate quantities of other foods such as milk, vegetables, fruits, meat, fish and eggs. The quantity of milk available has been estimated at about 5.5 oz. per adult per day, a quantity much below that necessary for adequate nutrition. The availability of fruits is about 1.5 oz. per day per adult, and vegetables about 1.3 oz. per adult per day, while the requirement is 3 oz. and 10 oz. respectively. They are very short of the requirement. Sugar at the rate of 1.6 oz. per adult per day is available while about 2 oz. is required. To raise consumption to the nutritional standard additional quantity required in 1955-56 is estimated at 2.2 million tons., about 0.7 million tons of which would be made up in the plan period. The availability of vegetable oil and ghee is of the order of not more than 1 oz. while 2 oz. is the actual requirement. As regards fish, roughly 0.3 oz. is available per adult per day whereas the requirement is 3 oz. The production of eggs, meat and fish is grossly inadequate and it is common knowledge that the intake of these foods by the majority of the population in most parts of the country is small or negligible. The existing food production data show clearly that the total food supply is insufficient in quantity and that the diet of the population as a whole is defective in quality since the protective foods which are needed to supplement the staple cereal grains are not produced in adequate amounts.

25. The results of diet surveys in India from 1935 to 1948 have been recently published. The conclusions reached are : "The Average diet of an Indian is lopsided primarily because of its extremely high cereal content. The other noticeable feature is that the diet lacks in adequate amounts of protective foods leading to inadequacy and very often to total lack of proteins of good quality. Inadequacy of minerals and most of the important vitamins in more or less varying degrees is the other important feature. It has not been sufficiently realised that the inadequacy of B group of vitamins is of the most serious import in view of the large intake of carbohydrates. Intake of vitamins A and C also is often inadequate". These surveys have led to the following observations: "It appears that two-thirds of the families did not consume any fruits and nuts at all. About one-third of the families did not consume sugar and jaggery or meat, fish or flesh foods, and a quarter of the family groups did not consume milk and milk products or leafy vegetables. Again, amongst the groups of families consuming particular foodstuffs the intake of leafy vegetables, other vegetables, ghee and vegetable oil and

pulses was below the desired or recommended level. Only in about one-fifth of the groups of families surveyed was the intake of pulses and other vegetables up to the recommended level. Though any generalisation on the data presented is not desirable for reasons more than one, yet it may be stated that in about four-fifths of the families surveyed the intake of protective foods was either nil or below standard".

26. The bulk of the population cannot afford to purchase a satisfactory diet. In terms of average income it would hardly be possible for more than 30 per cent of the population to feed themselves on an adequate scale.

27. A joint committee of the Indian Councils of Medical and Agricultural Research have suggested an integrated plan of human and animal nutrition in relation to agricultural production. They indicated the target requirements in 1956 as in the following table:—

Foodstuffs	Target Requirement Million Adult Units	
	Daily requirement in oz.	Annual requirement in million tons.
Cereals	14	43
Pulses	3	9
Green leaf vegetable	4	12
Root vegetables	3	8
Other vegetables	3	9
Fruits	3	9
Milk	10	31
Sugar and Jaggery	2	6
Vegetable oil, ghee	2	6
Fish and meat	3	9
Egg	1 No.	109,500 million eggs.

They took into account the food requirements of the animal population for the production of milk, meat, for work animals, for the follower stock and for maintenance. Large gaps were found between the requirements and the available supplies. As it was found that the deficiencies could not be made up, a modified plan has been suggested on the basis of utilising maximum potentialities of cultivable acreage, scientific methods of increased crop production and a modified target of human requirements. The modifications in the daily requirements suggested are :—

	Daily Requirement (oz.)	
	Recommended	Attainable
Milk	10	(a) 10 oz. + what exists today for 20 per cent of the population (i.e. vulnerable group). (b) what exists today for the rest of the population.
Vegetable oil and ghee	2	1½
Meat	1	1 (for 55 per cent of population only)
Fish Egg		Not considered.

28. There is no doubt that malnutrition occupies a very prominent position in the causation of high infantile, maternal and general mortality rates in India. Specific food deficiency diseases are in themselves a serious public health problem. In addition to well-recognised deficiency diseases, there are numerous other diseases in the causation of which nutritional factors are concerned. The general effect of malnutrition in lowering resistance to microbic and parasitic diseases must also be emphasised. Numerous investigations among school children in India have shown that a large percentage of children are in a poor state of nutrition with consequent impairment of physical and mental growth. Again in the adult population the ill effects of malnutrition are widely evident in the shape of low level of general health and reduced capacity for work. On the other hand, the striking improvement in the condition of Army recruits which takes place after a few months of abundant and satisfactory feeding is highly significant.

29. The creation of a nutritional section in the State public health departments is an essential first step in organising work. The prevention of deficiency diseases is an important responsibility of public health nutrition sections. It is the responsibility of public health departments to supervise through their maternity and child welfare services, feeding of mothers and infants. The development on a wide scale of school feeding schemes is strongly recommended. In all institutions where large-scale catering is done, the appointment of dietitians would be an important step. The education of specialised nutrition workers, workers in food trades and of the general public is very important.

The bulk of the provision under this head is from Bombay and Madras. The provision by the States is Rs. 11.9 lakhs.

30. The development and manufacture of synthetic vitamins in India is recommended. Similarly, improvements in the shark liver oil industry should be taken on hand and the possibility of manufacturing carotene preparations of high vitamin A activity from cheap and abundant vegetable resources should be investigated. The possibility of developing the production of food yeast is under examination. The processing of milk and fruits is of course of particular importance.

31. The widespread malpractices which affect the purity of food articles available in the market are an aspect of the food problem which should be attended to with vigour and a sense of urgency. The noxious substances which are often used as adulterants are doing insidious harm to the health of the people and the evil appears to be growing. This must be tackled on the footing of a principal priority both by the administration armed with adequate powers and the organised force of public opinion and social action. The Central Government have introduced a bill on the subject in the Parliament.

MALARIA

32. Malaria is the most important public health problem in India and its control should therefore, be assigned topmost priority in any national planning. It has been estimated that about a million deaths are caused in India every year by malaria among the 100 million

people who suffer from this disease. The economic loss is estimated at several hundred crores of rupees every year. Vast fertile areas remain fallow and natural resources remain unexploited largely due to the ravages of malaria. Aggregation of labour in irrigation, hydro-electric and industrial projects is attended with severe outbreaks of malaria if special steps are not taken for its control.

33. The use of D.D.T. as a residual insecticide has brought about far-reaching changes in the technique of the control of malaria and it has been successfully controlled with dividends several times the expenditure involved. The various Central and State projects and the Demonstration Projects of the W. H. O. and the U.N.I.C.E.F. have tackled only a fraction of the countrywide problem. It has not been possible to extend protection to the entire population in malarious areas due to lack of adequate finance, staff, equipment and supplies. So far only about 30 million out of the 200 million population exposed to malaria have benefited by the existing malaria control schemes. A comprehensive project for the nationwide control of malaria is now put forward.

34. The full malaria plan envisages a continuing programme consisting of co-ordination of all malaria control activities into the malaria control programme under the overall administration of the Central Government, strengthening of the existing malaria control programmes in the several States and establishment of malaria control programmes in the remaining States, providing malaria engineering consultation and other services to appropriate Central or State authorities concerned with development of irrigation, hydro-electric and other projects, extending training facilities and expanding the staff and facilities of the Malaria Institute of India to provide overall consultation and assistance to the States. The operational programme is based on the use of insecticidal residual spraying measures applied in rural areas protecting 200 million people and treatment with anti-malaria drugs. These operations are to be carried out by 125 field malaria control teams organised and directed by the State Directorates of health services. The plan includes the construction of a D.D.T. plant to supplement the one already programmed by the Government of India with the W.H.O. and the U.N.I.C.E.F. assistance, in order to ensure sufficient supply of D.D.T. at reduced costs to meet the needs of the country. Financing of the project is to be the joint responsibility of the Central and State Governments. The amount of money spent annually by the State Governments on malaria control is approximately Rs. 1.41 crores. There is a vast disparity from State to State in the provision of funds for the control of this disease. The total provision made in the five year plan by the States is Rs. 7.04 crores. Madras, Bombay, Uttar Pradesh, Bengal and Mysore account for the bulk of the expenditure. The plan now proposed for nationwide malaria control would involve a commitment of Rs. 15 crores over a period of 3½ years. This would be followed by a maintenance programme the cost of which would be on a much lower level. The local expenditure by States for the period would amount roughly to Rs. 5.00 crores but the scheme involves an expenditure of Rs. 10.00 crores from the Central Government including aid from T.C.A. It is expected that with the supply of D.D.T. and equipment during the programme period, the States would be in a position steadily to expand their anti-malaria activities and would be further able to supplement the expenditure from the increased resources which the immense improvements in the economy of the country would provide, as a result of the introduction of the nationwide malaria control programme.

FILARIASIS

35. The disease is widely prevalent in India particularly in some of the coastal regions, with high humidity and moderately heavy rainfall. It also occurs, with a patchy distribution, in the moist and humid Gangetic valley and Bengal Basin, in the foothills of the eastern districts of Uttar Pradesh and Bihar, as also in parts of the Deccan plateau and Southern India. It is difficult to state the number of cases of Filarial infection in India, but it has been estimated that there are about 157 million cases in Asia, of which the quota for India may run into many millions. The predominant type of infection is caused by *W. bancrofti*. Less commonly, the infection is caused by *W. malayi*. In the case of the latter infection, the larvae of the Vector mosquito breed in association with aquatic plants and therefore the control measures would differ from those called for in the case of the other infections. In the case of *W. bancrofti* infections, the long-term control measure is the provision of efficient drainage. As a short-term measure D.D.T. spraying is indicated. The measures, therefore, can be carried out by the same organisation which is meant to tackle the malaria problem on a nationwide scale.

TUBERCULOSIS

36. Tuberculosis is a major public health problem next in importance only to malaria. While accurate data are not available, it is estimated that about 5,00,000 deaths occur every year and about 2½ million people suffer from active disease. It is estimated that about 900 to 1000 million man-days are lost. The economic loss is therefore incalculable. Besides, it causes a mass of human misery. Measures needed to combat tuberculosis may be classified as general and special. Measures directed towards the improvement of the standard of living come under general measures. These include improvement of nutrition, housing, sanitation—each involving very large-scale commitments. Under the special measures may be mentioned the provision of isolation and treatment of the sufferer and introduction of preventive measures. It is an extremely difficult problem to provide either the institutions or the staff needed on the standards obtaining in other countries. A minimum programme in the order of priorities would be :

- (1) B.C.G. vaccination ;
- (2) Clinics and domiciliary services ;
- (3) Training and demonstration centres ;
- (4) Beds for isolation and treatment ;
- (5) After-care.

37. Emphasis has to be laid on preventive measures as these will yield the best return for the limited resources now available. Carefully tested experience in many countries over a period of 20 years shows that B.C.G. vaccination is an effective and safe preventive measure. The States should make this programme a part of their public health services. The Government of India have entered into an agreement with the U.N.I.C.E.F. and the W.H.O. to carry out a countrywide B.C.G. programme. It is estimated that if a mass B.C.G. campaign is worked out on the lines indicated it would be possible in a period of

about 15 to 20 years to reduce the mortality from tuberculosis to a fifth of its present level and the bed accommodation necessary for the isolation of cases could similarly be cut down to about a fifth of the total requirements. For the expenditure involved therefore, B.C.G. vaccination would give a very high return and considerable saving in the other control measures.

38. Among the institutions, we accord the highest priority to the clinics. The clinics will have to undertake preventive, diagnostic and curative functions. The clinics must have some beds at their disposal and also an adequate staff of doctors and health visitors to provide domiciliary services. Although it would be advisable to have one clinic for 1,00,000 of the population the effort in the next five years may be directed to the establishment of the clinics as special departments of teaching hospitals, district hospitals and other general hospitals, where X-ray and laboratory facilities exist.

39. The establishment of a certain number of model tuberculosis centres which will serve the purpose of teaching and demonstration is regarded as important because of the shortage of personnel for manning tuberculosis services. Each centre should consist of a clinic with attached beds and the clinic should provide fully comprehensive laboratory services and facilities for epidemiological investigation by mass radiography etc. in co-operation with X-ray departments. It is advisable to locate these centres in association with medical college hospitals. Three such centres are being established with international aid in Delhi, Trivandrum and Patna. It is suggested that similar centres may be established in Calcutta, Bombay, Madras, Punjab, Uttar Pradesh, Madhya Pradesh, Hyderabad, Mysore, Madhya Bharat, etc.

40. The bed accommodation should be in the form of simply designed and cheaply constructed institutions. Priority of admission should be given to those for whom domiciliary isolation or treatment is impossible. Non-official organisations should be encouraged to establish and run tuberculosis institutions and Governments should give them building and maintenance grants provided these institutions are run on non-profit basis.

41. Voluntary organisations should be stimulated to set up, with State aid, after-care colonies at suitable places in association with tuberculosis institutions.

42. For the proper development of tuberculosis control programmes, a special T.B. Adviser should be employed in each State.

43. It is estimated that a reasonable programme on the lines set out above would cost about Rs. 8.00 crores. Available resources limit the scope of the programme. However, the Centre and the States have made substantial provision and have shown considerable progress in their schemes. West Bengal has the highest provision followed by Bihar, Madhya Pradesh and Bombay. Among Part 'B' States Saurashtra has the highest provision and Mysore and Hyderabad come next. Among the Part 'C' States Delhi has a considerable

T.B. programme. The schemes, generally are concerned with the provision of sanatoria, hospitals and clinics, increase in the bed-strength and B.C.G. vaccination teams. Compared with 1950-51, the plan envisages an approximate increase by 1955-56, as shown in the following table :—

	1950-51		1955-56	
	Number of Institutions	Number of Beds	Number of Institutions	Number of Beds
Sanatoria	37	4,161	46	5,656
Hospitals	48	3,077	50	4,814
Clinics	127	2,323	180	2,562

The number of B.C.G. Teams is expected to increase from 73 in 1950-51 to 137 in 1955-56. The States' schemes would cost Rs. 3.80 crores and the central schemes Rs. 51.43 lakhs.

VENEREAL DISEASES

44. The incidence of venereal diseases in India is unknown, though a rough survey made some years ago indicated a high incidence. Sufficient data now exist to suggest that in the large cities of India, particularly Bombay, Calcutta and Madras, venereal disease prevalence is high reaching 5 to 7 per cent of the population for syphilis alone. The problem in rural areas is not defined but the hill tracts extending from Kashmir to Assam (especially Kashmir, Kulu, Himachal Pradesh and Assam) appear to have an alarmingly high prevalence of syphilis. The importance of venereal disease from the point of view of producing sickness and incapacitation cannot be overemphasised. The measures for the control of these diseases are :—(1) the provision of medical care—preventive and curative ; and (2) social measures to discourage promiscuity and to control prostitution. The measures would include free and efficient treatment, case finding and follow-up services, adequate diagnostic facilities, education and training of personnel and lastly the education of the people in regard to the spread and control of these diseases.

45. The creation of the post of a Provincial V.D. Control Officer with suitable assistance on the establishment of each Director of Health Services is necessary to plan the campaign against these diseases as part of the health administration. West Bengal and Himachal Pradesh have a full time V.D. Control Officer on the staff of the Directorate of Health Services. In Madras, the State Government have nominated the Lecturer in Venereology, General Hospital as consultant with the right of inspection of existing facilities in the State.

46. V.D. clinics with requisite staff should form part of the general health facilities provided in a district hospital. For the purpose of case finding and follow-up, it is essential to employ nurses, health visitors and social workers in connection with the V.D. clinics. For the period of the plan, it is proposed that each State should provide such clinics in the district

hospitals. For the treatment of patients necessary provision should be made for the purchase of anti-biotics in adequate quantity. The importation of penicillin in bulk and the projected penicillin plant are intended to answer this purpose.

47. Diagnostic facilities should be provided in the public health laboratories at the State headquarters, and in the regional and district laboratories. Such facilities should be made available free of charge not only to institutions but to all private practitioners. It is considered necessary to set up an advisory body to assist in ensuring comparable serological performance in the main laboratories of the country. The Indian Council of Medical Research may serve this function. It is also essential to provide standard antigen to State institutions as well as to private laboratories to maintain a high standard of technical performance. The Government of India have sanctioned an antigen production unit in collaboration with the W.H.O. and the U.N.I.C.E.F. The cost of the project is Rs. 72,000 for the production unit and Rs. 28,000 for the staff or a total of about Rs. 1 lakh.

48. The proposed extension of treatment facilities will be possible only when a sufficient number of doctors and other personnel have the necessary special training for the purpose. Such training should also be made available to private practitioners. These facilities may be organised as follows :—

- (1) Training facilities in venereal diseases will be available in the upgraded V.D. department, General hospital, Madras. The Government of India have concluded an agreement with the W.H.O. for the upgrading of the V.D. Department of the Madras Medical College.
- (2) Improvement in existing facilities may be considered at the following places where teaching and training activities are undertaken :—
 - (a) *Bombay*—J.J.Hospital—Venereal diseases department and Pathology department, Grant Medical College.
 - (b) *Delhi*—In connection with the All India Medical Institute.
 - (c) *Calcutta*—There is a combined scheme of the Government of India and the Government of West Bengal to utilise the existing resources of the V.D. department of the Medical College Hospital, the rural and urban health centre facilities of the All India Institute of Hygiene and Public Health, Calcutta, the clinics of the Government of West Bengal under their Director of Social Hygiene and the Serologist to the Government of India, Calcutta. The whole scheme is expected to cost Rs. 1.03 lakhs.

These training centres will train V.D. control officers who will take charge of the State V.D. programmes.

49. Education including sex education and provisions, legal and institutional, for the control of immoral traffic are important measures.

50. The V.D. schemes of the States and the Centre included in the Five Year Plan would cost Rs. 1.03 crores and Rs. 5.79 lakhs respectively. West Bengal is practically the only State with a comprehensive V.D. control scheme costing Rs. 84.30 lakhs.

51. Yaws is a non-venereal disease closely related to syphilis and amenable to the same treatment. It is known that Yaws is fairly widely prevalent in certain tracts of India, particularly among the tribal population in Madhya Pradesh, Madras, Hyderabad and Orissa States. A plan of operation has been agreed to by the State Governments and is awaiting the approval of the Government of India and the signing of an agreement with the W.H.O.

LEPROSY

52. It is estimated that the number of cases of leprosy in the country is probably at least one million. About one-fourth of a million may be lepromatous cases. The highly endemic areas of leprosy in India are certain parts of West Bengal, Orissa and of Madras and Travancore-Cochin. There is moderate incidence of the disease in the Himalayan foothills and Central India. The incidence of leprosy is remarkably small in the rest of the country. In highly endemic areas the incidence may range from 2 to 5 per cent of the population.

53. The existing anti-leprosy work is being carried out largely by voluntary organisations. The mission to lepers is the largest agency engaged in anti-leprosy work. Lately, State Governments and even local authorities have started the establishment of in-patient accommodation for leprosy. The total accommodation available is about 14,000 beds for the whole country. The Hind Kusht Niwaran Sangh has actively helped in carrying out anti-leprosy work. The Gandhi Memorial Trust has established a Leprosy Committee and taken up work in earnest. They have set apart a sum of Rs. 95 lakhs for combating the disease.

54. As a first step, it is necessary to carry out investigation of leprosy as a public health problem in local areas. Secondly, in those areas in which the prevalence of the disease is shown to be high, curative and preventive measures have to be organised and thirdly, there should be stimulation of voluntary effort and education of the public to secure their cooperation. To promote these objectives, special training at the under-graduate and post-graduate stages of medical education and facilities for leprosy research will have to be provided. The creation of a Central Leprosy Institute for post-graduate training and research has been included in the plan. It is essential that, as a preliminary step towards organising anti-leprosy work on sound lines, a leprosy organisation should be created at the headquarters of each State in which the disease is a definite public health problem. Provision for the isolation and treatment of all infectious cases is not possible with our present resources and efforts should be directed towards the provision of reasonable bed accommodation in institutions in heavily endemic areas for leprosy. Such accommodation is needed for the treatment of infective patients and for the remedial treatment of crippling and deformities. In considering any additional accommodation the recent advances in the treatment of leprosy

have to be taken into consideration. The introduction of sulphone drugs in the treatment of leprosy marks a distinct advance. It is possible with this treatment to have a comparatively quicker turnover and to continue treatment in the out-patient departments. We have to depend for the solution of the problem mostly on the organisation of clinics, from which treatment and preventive care of leprosy patients and their contacts has to be carried out. Children are much more susceptible to leprosy than others and every effort should be made during home visits by the doctors and others to impress this fact on the people and to secure that children are safeguarded. The clinics should be established in hospitals in areas in which the incidence of the disease is high. Attempts at group isolation of the rural colony type by voluntary efforts may be encouraged and voluntary efforts should be supported by definite provision of grants-in-aid. The schemes of the States and the Centre would cost Rs. 1.02 crores. West Bengal, Bombay, Madhya Pradesh and Bihar among Part 'A' States, Hyderabad and Mysore among Part 'B' States, Vindhya Pradesh and North-east Frontier Agencies among part 'C' States account for the bulk of the provision. The provision of Rs. 15 lakhs by the Centre relates to the Central Leprosy Institute.

CANCER

55. The incidence of malignant disease is much the same in India as in Western Europe and North America. The annual death rate from cancer in most countries varies from 100 to 150 per 1,00,000 living persons of either sex. 2,00,000 per year is a conservative estimate of cancer deaths in India. The death rate from cancer may probably go up in future with an increase in the proportion of population in older age groups. While the rate of incidence in various countries may show small differences, the incidence in various parts of the body is markedly different in different peoples. There is a greater frequency of oral cancer in Indians. Cancer of exposed portions of the skin is less common than in the fair-skinned people. Cancer of cervix uteri is much less common in certain communities in whom breast cancer is more common.

56. Early diagnosis and prompt treatment based on the knowledge at present at our disposal will definitely result in many cures. The detection of the early stages of the disease can be achieved by education of the public and better cancer education for the general medical profession. For the better understanding of the disease—the phenomenon of abnormal growth—its initiation, etiology, pathology, further development and treatment, persistent research appears to be the only solution. Cancer education and cancer research require considerable organisation and financial as well as moral support from the Government and the public.

57. Cancer education for the lay public may be organised jointly by the Indian Cancer Society, Indian Cancer Research Centre and cancer hospitals in the country. An efficient social service should be established where a group of trained social workers would work under the direction of an experienced research worker from the research centre. Efficient means of spreading knowledge about cancer to the public may be by the use of the radio, the film and the press, and by work in cooperation with existing organisations for social

services, women's societies, etc. Under cancer education for the medical profession, better attention should be paid to cancer education of under-graduate medical students ; refresher courses should be given to members of the medical profession of some standing and for well established scientists interested in cancer research. Another step would be to train fresh graduates who like to devote time to training in some phase of cancer work. A few traineeships should be made available for this purpose.

58. Cancer research may be divided broadly into (i) fundamental research in the laboratories, and (ii) applied or clinical research in the clinics. Integration of these two activities is very important. Clinical research would include the diagnosis of cancer, the treatment and cure of cancer, and clinical investigation on cancer patients. Fundamental research includes : (a) the biological and biochemical study of cancer cells, and (b) the etiology of cancer. Research on the above lines is in progress at the laboratories of the Indian Cancer Research Centre which is financed by the Central Government. However, for a proper carrying out of all the items enumerated, the research centre would require further financial help. At present the annual budget of this research centre is only Rs. 1,45,000. No national research institute in India can be expected to advance our knowledge and serve the whole country on a budget so small as that available to the Cancer Research Centre. The annual recurring grant to the Indian Cancer Research Centre would require to be increased by about Rs. 1.5 lakhs. The institute would also require a non-recurring grant for purchasing essential apparatus and equipment. This equipment may cost about Rs. 2 lakhs.

59. The different States could play a very important role by organising their activities, in association with their health services. The training of the personnel can be undertaken at the Tata Memorial Hospital with a small subsidy for scholarships to the trainees, partly from the Central and partly from the State Governments. The Tata Memorial Hospital and the Chittaranjan Hospital at Calcutta are the only two special institutions for cancer. The Women's Indian Association at Madras has been making vigorous attempts to start a cancer hospital in Madras and some assistance (Rs. 1,00,000) to them would appear desirable. The All India Cancer Association would also need some assistance (Rs. 50,000) to carry out its publicity work.

MENTAL DISEASES

60. Although little information is available regarding the incidence of mental ill-health in the country, there is no doubt that mental disorder and mental deficiency are prevalent on a wide scale. The number of persons suffering from varying degrees of mental disorder who may not require hospitalization but should receive treatment and of those suffering from mental deficiency is likely to run into several millions. The existing provision for the medical care of such persons is altogether inadequate and unsatisfactory. Each State health administration, through its mental health organisation, should attempt collection of information. It is estimated that hospital accommodation should be available for 800,000 mental patients but the existing provision is a little over 10,000 beds for the country as a whole. Radical improvements are required in the existing mental hospitals in order to make them

conform to modern standards. Provision should also be made for all the methods of diagnosis and treatment. Apart from such remodelling of mental hospitals, the Central Government are upgrading two mental institutions, *viz.*, one in Bangalore and the other at Ranchi. The establishment of an All India Institute of Mental Health in association with the Bangalore Mental Hospital will involve an expenditure during the five year period of Rs. 9·7 lakhs non-recurring and Rs. 3·4 lakhs recurring. This expenditure is to be shared between the Central Government and the State Government of Mysore. There are hardly any psychiatric clinics. A beginning should be made in special and teaching hospitals and later extended to district hospitals. There are no facilities for training in psychological medicine in the country. It is necessary that a certain number of selected medical men with some experience of work in mental hospitals in India should be sent abroad for training.

61. The provision made by the various States and the Centre for mental hospitals is indicated below :—

		(Rupees in lakhs)	
State	Schemes	Expenditure 1951—56	
Mysore . .	Mental Hospital, Bangalore . .	5·00	
Saurashtra . .	Training in psychiatry . .	0·04	
Ranchi . .	Mental Hospital, Ranchi . .	4·00	
TOTAL		9·94	

MATERNITY AND CHILD HEALTH

62. Maternity and Child health is a service that is kept in the forefront in the planning of health programmes. The protection of the health of the expectant mother and her child is of the utmost importance for building a sound and healthy nation. The maternal mortality of India is very high and is estimated at 20 per thousand live births. Maternal morbidity is also very high being nearly 20 times the mortality. The infant mortality rate is of the order of 127 per thousand live births. The corresponding rates in progressive countries are very low and have been achieved by concentrated effort on the improvement of the health of the mother and child.

63. The lack of trained personnel like women doctors, health visitors, midwives, dais, etc., and of institutional facilities for training them add to the handicaps to provide an efficient service. The growth of maternity and child health work has been mainly through voluntary efforts and Governments and local authorities have taken it up only recently. Maternal and child health services should form an integral part of the general health services. Many of the States have developed the service in varying degrees, Madras, Uttar Pradesh, Bombay and West Bengal, leading. It is essential to have on the staff of each Director of Health Services a specially trained woman medical officer. At present it is understood

that only 9 States have got such organisation at the headquarters of the States. In a very few States, women doctors are employed in both urban and rural areas. The pattern of organisation for urban and rural areas may be considered separately.

64. While it is desirable to develop community centres which can cater to the needs of all members of a family and the whole community, such a development may not be possible except gradually. We have, therefore, to develop the ordinary type of maternity and child health centres. An adequate number of such centres properly equipped and staffed should be provided in all the urban health organisations. One centre with a minimum staff of one health visitor, 2 midwives, a peon and a part-time sweeper to serve a population of 10,000 is recommended. In addition, there should be a woman doctor preferably with post-graduate training in maternity and child health to be in charge of these centres. There is ordinarily overcrowding in practically all the maternity hospitals and the number of maternity beds should be increased to double its present strength in order to accommodate more delivery cases and to give post-natal care for a longer period. 10 per cent of the maternity beds should be reserved for ante-natal cases. It is also essential to reserve for children at least 10 per cent of the beds where there is no separate children's hospital with adequate number of beds. Ante-natal and post-natal clinics should form an essential feature of all hospitals with maternity beds. Provision should be made for day nurseries to look after infants and children of working mothers with the help of voluntary organisations or under the provisions of the Indian Factories Act. Private nursing homes established by doctors should be licensed.

65. In rural areas the present trend is to provide integrated curative and preventive health services and to organise them on the basis of health centres of different grades. There should be a unit for 10,000 to 12,000 population for efficient service. This will yield a total of 300 to 400 births a year. The maternity and child health staff in such a centre should be two midwives. A number of such primary centres would come under a higher unit for the Thana or Taluka. Here the staff for maternity and child health work should be a woman doctor and 2 health visitors. Their main functions would be training of dais, supervision of midwives and dais, care of maternity cases needing hospitalisation and conducting the clinics in the different peripheral units. One of the important activities of health units in intensive development areas like the community projects is the provision of adequate maternity and child health services, both in the primary centres and at the headquarters of the project areas in the secondary centres.

66. All doctors engaged in maternity and child health work should have training in this branch of preventive medicine for a period of at least three months, and must have done a house job in an obstetrics department for at least six months. The practical training should cover both rural and urban fields. The period of field training will vary according to the total period the course covers. The department of maternity and child health of the All India Institute of Hygiene and Public Health in Calcutta is to be expanded as a Centre for post-graduate training for maternity and child health doctors and for public health nurses with the aid of the U.N.I.C.E.F. Rural and urban training fields for nurses and midwives in the Delhi area and paediatric training centres in Madras, Bombay and Patna (Hyderabad is also under consideration) are being developed by Government with the W.H.O. and the U.N.I.C.E.F. assistance.

67. Voluntary organisations have played an important role in the past. They were responsible for starting the training of dais, midwives and health visitors. Voluntary bodies have also been responsible for the establishment and maintenance of a large number of maternity and child health centres. But the responsibility for providing such services rests upon the Government. The activities of the voluntary bodies should supplement the functions of Government. Government should have power of supervision and control to ensure that health activities of voluntary organisations are maintained at a satisfactory level and they should extend the fullest support to these organisations. The provision made by the various States for maternity and child health work is Rs. 1.35 crores and by the Centre Rs. 53.48 lakhs.

HEALTH EDUCATION

68. All progress in public health depends ultimately on the willing assent and co-operation of the people and their active participation in measures intended for individual and community health protection. Considering how much illness is the result of ignorance of simple hygienic laws or indifference to their application in practice, no single measure is productive of greater returns in proportion to outlay than health education.

69. To be effective, health education should be addressed to the different sections of the public in a manner suitable to each. Women and children constitute the most important section. Educating the woman is educating the whole family. The formation of healthy habits in growing children in their formative years is most important. No agency is better equipped to reach this class and carry the message of health than the maternal and child health staff, the woman doctor, the public health nurse or health visitor, the midwife or the dai. The extension of this service on the widest scale is therefore of the greatest benefit. The school-going population is a large and important section. The most important thing in the primary schools is not so much the academic instruction but the inculcation of health habits. These cannot be fostered without minimum hygienic facilities in the school premises. The instruction in hygiene is graded to suit the class of pupil in the higher standards and project methods may be adopted. It is important to include the subject in teachers' training. Publicity may be addressed to the adult population in places of work, recreation or at home. Part of the educative work is intended for the professional class and those engaged in health work. They should be kept informed of what is happening in all progressive communities.

70. It is of the greatest importance that not only all available modern methods of publicity should be adopted but that they should be as attractive as possible and intelligible to the large section that are not literate. Audio-visual aids, the radio, the cinema, and the press should be extensively utilised. Television would come into use in due course. Gramophone records, cinema films, film strips, lantern slides, picture posters, leaflets, book marks and picture cards should be produced and spread widely to the public in any attempt at effective publicity. The material prepared for imparting health knowledge to the people should draw upon all available sources, including the traditional practices and

Ayurvedic texts. Nature cure can furnish useful help for the maintenance and improvement of health and vitality. The testing and standardization of this scattered knowledge offers an important field for research. The provision of health museums in the Centre and in the States is an extremely important measure. These could produce useful publicity material as well as educate and entertain the public. The organisation of health exhibitions on all occasions when large congregations of people take place is very useful. Theatricals and variety entertainments can form part of interesting publicity campaigns.

71. To organise the work, it is essential to have health publicity bureaus in the Centre as well as the States. They should be properly staffed and equipped. It is of importance that they should have the aid of a good library service as well as a museum and units for the production of the requisite educational aids and materials. Health publicity should form an integral part of the district health organisations' work. Full advantage should also be taken of voluntary effort in this work. Several States have excellent organisations. The Centre has a scheme which includes in its scope the establishment of a health publicity bureau and facilities for the production of health educational material (film strip production unit and printing unit) at an estimated cost of Rs. 15 lakhs.

MEDICAL EDUCATION, MEDICAL RESEARCH AND MEDICAL RELIEF

72. Medical education, medical research and medical relief are intimately interconnected. It is generally accepted that the quality of medical relief is vastly improved by the presence of a teaching hospital and college in any area and again the quality of medical education improves greatly in an atmosphere of medical research. It is, therefore, obvious that the planning of these activities should be taken up together. Pointed attention has been drawn to the extreme shortage of all types of health personnel like doctors, dentists, nurses, health visitors, pharmacists etc. Top priority has, therefore, to be given to the training of health personnel in order to develop a reasonable health service in the country.

73. There are at present 30 medical colleges training candidates for the M.B.B.S. degree. There are also 4 medical schools for the training of licentiates. It is expected that these would be upgraded into colleges. Only one uniform minimum standard of training and qualifications prescribed by the Indian Medical Council should be adopted throughout the country. All the medical colleges provide for the admission of 2,500 students annually and nearly 1,600 qualified doctors pass out a year. It is suggested that the training facilities should be extended so that at the end of 5 years there may be provision for 4,000 admissions in the medical colleges. New medical colleges should be established where large hospitals exist to minimise the cost.

74. There is considerable dearth of teaching personnel even in the existing medical colleges, particularly in non-clinical subjects. These posts should be made more attractive. It is suggested that whole-time teaching units may be established in medicine, surgery and midwifery. The officer in charge of a whole-time unit will devote all his time to the organisation of teaching and research work in his subject. It is understood that the Indian Medical

Council is contemplating the introduction of a system of compulsory internship in the medical course leading to the degree of M.B.B.S. It is recommended that certain selected hospitals in the States may be upgraded so that they can be utilised for this purpose. Throughout the course of instruction in the medical colleges, it is necessary that emphasis should be laid on the importance of preventive and social aspects of medicine and rural health. For this purpose the following steps would be necessary :—

1. Strengthening the preventive and social medicine departments in the medical colleges ;
2. The provision of urban and rural health units to give the students experience of these aspects of medicine ;
3. A definite period of internship in the health units.

Although most of the universities with medical faculties have instituted post-graduate degrees and diplomas, existing facilities are neither adequate nor of the required standard. The establishment of an All India Medical Institute is for providing adequate facilities in this field. It is at the same time considered necessary to upgrade certain departments of existing medical colleges and institutions for post-graduate teaching and research. For standardising and co-ordinating post-graduate medical training Government of India have instituted an All-India Council of post-graduate medical education.

75. Practically all the teaching hospitals in the country impart training in nursing. A college of nursing for the purpose of giving training of the University standard has been opened in Delhi. There is a similar college in Vellore. Public health nursing is specially included in the instruction imparted in the B.Sc. course in the two nursing colleges. The department of maternity and child health of the All-India Institute of Hygiene and Public Health in Calcutta will also be a centre for the training of public health nurses. It should be possible to train a larger number of nurses than is done at present even in the existing teaching institutions. The deficiency can be overcome if a larger number of probationers are admitted to the training schools attached to the teaching hospitals. The number should at least be doubled. Larger number of sister tutors should be employed not only in the teaching hospitals but also in other hospitals where probationer nurses are trained. Increased facilities for the training of auxiliary nurses will greatly help in building up the personnel required. The community projects that are to be started immediately will call for a large number of personnel of this type. The expansion of maternal and child health services in the rest of the areas outside the community projects, even on a modest scale, would require very considerable numbers. The usual courses of training will take up a considerable time and short-term courses would therefore appear to be the only solution. Besides, persons with requisite, preliminary educational qualifications may not be coming up in sufficient numbers to meet the demand and the auxiliary courses where the preliminary educational qualification required is less than for the normal courses would facilitate recruitment of sufficient number of candidates. It may not be possible for the Government alone to deal with the question fully. Non-governmental agencies may therefore be invited to take up this work and adequate assistance given to them for running these short-term courses. In

view of the urgency of finding personnel for various development schemes, the training of ancillary personnel of this type should receive very high priority. A beginning has been made by a voluntary organisation in Madras with the aid of the public, the State and the Central Government. This type of activity may be taken up by other States.

76. There are training schools for health visitors in Delhi, Lucknow, Calcutta, Madras, Poona, Bombay, Nagpur, Hyderabad, etc. The conditions of training vary greatly in these institutions. In the training of health visitors and in the training of public health nurses provision should be made for instruction in subjects such as tuberculosis, etc. The opinion is gaining ground that as far as possible in future health visitors should be trained public health nurses.

77. The training facilities for midwives have to be considerably expanded. Each of the existing institutions with maternity beds can take in larger numbers of trainees. The training of auxiliary midwives would be a contribution to the solution of this question. Domiciliary midwifery should form an important part of the training of midwives. The training of indigenous dais has also been attempted in certain States. Under proper supervision the local trained dais may turn out satisfactory.

78. Facilities should also be provided for the training of medical social workers.

79. Public health engineering is a very important aspect of public health. It has not received due consideration so far in teaching centres in India. The All India Institute of Hygiene and Public Health has been giving training to qualified engineers in sanitary engineering as a post-graduate course. The course in this institution trains the candidates for the degree of Master of Engineering in public health given by the Calcutta University. Similar facilities should be provided in other States as well.

80. The bulk of the health personnel in a State is composed of qualified sanitary inspectors. There is need for standardizing this course. There is also an obvious need for the training of a larger number of Sanitary Inspectors.

81. There should be a specific allocation of funds both from the Central revenues and from the State revenues for medical research in the country. This money should be spent in the research institutes and medical colleges. The various departments in the medical colleges should be encouraged to take up research work in addition to their routine teaching duties. Adequate staff should be provided for this purpose. The creation of full-time units in medicine, surgery and midwifery will facilitate research work in those departments. Necessary technical assistance and equipment should be provided in non-clinical departments to participate in such programmes. Both for purposes of teaching and research in medicine an up-to-date library with sufficient number of journals and books is imperative. The history of medicine should be taught and a chair should be instituted in every university with a medical faculty. The research institutes, Central and State, will be concerned in the carrying out of researches in special subjects and investigations into the social and environmental factors affecting health and disease. We suggest the provision of improved laboratory

services in the different States, through the creation of regional laboratories to be linked locally with other organisations in connection with the health programmes and for technical direction with the central laboratory at the headquarters of the State. The Indian Council of Medical Research initiates programmes of research in several fields on urgent problems facing the country. It also creates a nucleus of trained research workers. The recruitment, training and utilisation of research workers has been a problem of some importance in this country. Fellowships are offered by various international bodies, by Governments of several countries, as well as the Government of India and the Indian Council of Medical Research and a well-considered plan is necessary in order to take the fullest advantage of the scheme. It should consider the requirements of :

- (1) Teaching institutions ;
- (2) The research institutions maintained by the Central and State Governments;
- (3) Research units and research schemes of the Indian Council of Medical Research.

The fellows should be ultimately assured of absorption in the services. There should be a survey of such needs and a tabulation of the programme of fellowships for a definite period. There should also be a follow-up to ensure that the fellows are employed for the purpose for which they are trained. The Central Government have provided Rs. 57·05 lakhs for research.

82. The Central Government have provided for the establishment of an All India Medical Institute, including a dental college, upgrading the existing departments of medical colleges, Lady Hardinge Medical College, College of Nursing, establishment of departments of social and preventive medicine in certain medical colleges, increased training facilities for nurses, nursing home and training centre for auxiliary nurses and midwives at Madras and Lady Reading Health School. Central expenditure is Rs. 5·13 crores on medical and Rs. 86·99 lakhs on public health education and training. The States have included schemes under education and training to the extent of Rs. 13·79 crores (medical) and Rs. 44·53 lakhs (public health).

83. The States have a programme of improved medical relief by the expansion of existing institutions and the provision of new institutions. The provincialisation of existing dispensaries, provincialisation and improvement of the thana or taluk hospitals, the expansion of district hospitals and of teaching hospitals at the headquarters of the State or other important centres constitute the components of this expansion programme. The greatest emphasis should be on rural health and the development of primary health units. The States and the Centre provide Rs. 24·10 crores and Rs. 52·2 lakhs respectively.

INDIGENOUS SYSTEMS OF MEDICINE

84. A great deal of uncertainty exists about the position and the future course of development of indigenous systems, homoeopathy and nature cure. It is desirable that this should be cleared up as early as possible. The controversy with regard to the truth and merits of any particular technique of cure or approach to the problems of health and disease

can only be settled on the touchstone of research. Scientifically conducted investigations will, in course of time, decide the value and validity of the different techniques and those which can justify their existence will necessarily become branches of an integrated system of medicine. In the five year plan a provision of Rs. 37.5 lakhs has been made for research into indigenous and other systems. Government of India have sanctioned a central institute for research in indigenous systems of medicine at Jamnagar. It is considered necessary, however, to promote research at more than one such centre, particularly at places where plenty of clinical material and high standard of professional talent are available. Provision has to be made specially for a comparative clinical study of different techniques. A nucleus for this purpose already exists in Bombay and has the support of eminent representatives of the various systems. Steps should be taken to strengthen and expand this institution. Besides assessment of the area of utility of these systems, there is a large scope for research in order to improve and enlarge their special contribution to medical science, to define, interpret and standardise the content of their theory and practice and to bring them in line with modern scientific advances. Research into all aspects of indigenous systems including drugs, principles and practices should be fostered not only in institutions devoted to the study of indigenous systems but also in modern medical institutions.

85. It is essential to make adequate arrangements for a systematic investigation into Indian medical herbs, from the point of view of identification, nomenclature, the area in which they are available and those localities in which individual herbs can be grown to the best advantage. It is recommended that, following this study, museums should be established centrally and regionally so as to enable students and practitioners of Ayurveda and other systems of indigenous medicine and Homoeopathy, to have access to all the information regarding these herbs. Early action is also needed regarding the collection, standardisation, storage and distribution of Indian medical herbs. Studies regarding these should be undertaken jointly by the Central Institute for Ayurvedic Research and by the Central Drugs Research Institute at Lucknow. Central agencies will have to be created for the purpose of co-ordination and direction of research which should be mainly in the hands of experts of the systems concerned.

86. Professional training for the practice of the indigenous systems is an important matter for consideration. The present approach to the education in Ayurveda has not produced satisfactory results. There is no uniform basis for the curricula adopted in different institutions. There is much room also for improving the quality of the teaching staff and the terms of its employment. The introduction of honorary teaching may help to draw the best elements in Ayurveda for assisting the educational work. A curriculum drawn up for the purpose has to be designed primarily to enable the student to attain full proficiency in the practice of the particular system. But he cannot afford to ignore the body of medical knowledge which has grown up under the impetus of scientific methods. As has been well expressed, "it is not necessary that he should be able to apply these technical procedures himself at all times, particularly in surgical specialities, but it is essential that he should have the knowledge which will enable him to recognise the need for calling in the aid of these specialities in the interests of his patients". The details of the curriculum which can satisfy both these conditions will

have to be worked out with the help of the results of research and experience. It is evident that the Ayurvedic portion of the curriculum has to be considerably strengthened and enlarged under the direction of experts in this field. The minimum qualification for admission should include the equipment needed for acquiring a mastery of Ayurveda in addition to a knowledge of the basic sciences as the essential foundation of medical education. Early steps will have to be taken for upgrading of selected institutions. At least one of them should be fully equipped for high level research as well as education of the requisite standard. The consensus of opinion seems to be in favour of a full course extending over a period of five years. There is also demand for a three years junior diploma course to meet the immediate needs of the country. This, however, needs examination in view of a large body of opinion in favour of a single course of training. Besides the State Medical Boards appointed for the purpose of regulating registration and practice in these systems, which should also deal with the standards of education, with supervision over instruction and with professional conduct in the respective systems, Central Councils may be necessary. Rs. 95.23 lakhs have been provided for education and training in indigenous systems of medicine, and Rs. 1.06 crores, for hospitals and dispensaries as well as other schemes of indigenous medicine by the States. Uttar Pradesh and Hyderabad have provided the maximum for hospitals and dispensaries. Bihar, Madhya Pradesh, Saurashtra and Travancore-Cochin devote considerable amounts for education and training, and account for the bulk of the expenditure of the States.

87. With regard to Homoeopathy, the proposals of the representatives of the profession appear to be reasonable and are, in the main, as follows:—

- (1) A Central Council of Homoeopathic Medicine may be formed.
- (2) Suitable colleges among the existing ones may be up-graded and standardised, and the question of starting new institutions may also be considered.
- (3) The course in the colleges may be common during the first two years and students will then learn homoeopathic philosophy, materia medica and therapeutics and allied subjects in 3 years.
- (4) Facilities for homoeopathic research may be provided.
- (5) A Central homoeopathic drug manufactory and laboratory for standardisation of drugs may be opened at Lucknow.

88. The significance of what goes by the name of nature cure can be better appreciated if it is considered as a way of life rather than a system of treatment in the narrow sense. Its emphasis on positive health, conservation of vitality, self-help in matters of health and its advocacy of simple ways of using the varied forces of nature are elements of its special outlook. Many of its techniques have become assimilated in the general practice of medicine and it has much common ground with what has come to be known as physical medicine. Nature cure is being practised in India both as a basic system embodying the simple approach made popular by Mahatma Gandhi and as a modern system, for which it is claimed that it is based on the fundamental curative principles which are inherent within

the human personality. In dealing with the question of nature cure, we have to reckon with several viewpoints. It is contended that nature cure does not exist as an independent system. On the other hand, there is a school of thought which regards nature cure as self-sufficient, but so simple that it requires no elaborate provision for training or treatment. The practitioners of the modern system of nature cure insist, however, that it is a wide and vast field and it is necessary to create at least one central teaching institution in which the existing knowledge of the subject is standardized, research is carried on and instruction imparted to students. It appears, therefore, that these and several other aspects of the question require further enquiry. Immediate action in respect of nature cure may take the following lines:—

1. Nature cure should be included in the scope of research and steps should be taken for standardising the knowledge on the subject.
2. The possibility of including the teaching of physical medicine in the All-India Medical Institute should be explored and facilities provided for education in such treatment as confirmed by research and experience.
3. Facilities should be provided for the wide dissemination of the principles of nature cure, as confirmed by research and experience.

DRUGS AND MEDICAL REQUISITES

89. The supply of therapeutic substances and medical appliances ranks very high among the priorities in the national health plan. The carrying out of medical and health programmes will be made impossible without adequate supplies of drugs and appliances. It should be possible adequately to provide for these essential needs through a combination of private enterprise suitably assisted where necessary, and production by the State where this is found to be in public interest. The final responsibility should rest with the Government for seeing that the essential needs of the country in respect of important medical requisites are met satisfactorily in regard to quality, quantity and price.

90. Under the Drugs Act of 1940 the responsibility of the Centre is to regulate the standard of drugs imported into the country and the establishment of the Central Drugs Laboratory and also to correlate the work of administering the Act in the States, the States being responsible for control over manufacture, sale and distribution of drugs. The implementation of the Act has reached various stages in the States. Bombay, Uttar Pradesh, Madras and West Bengal have shown greater progress than others. The provisions of the Drugs Act have been extended to Part 'B' and Part 'C' States. All the States should effectively implement the provisions of the Drugs Act by the employment of an adequate number of qualified Drug Inspectors and the establishment of well-equipped laboratories staffed by qualified analysts. Black-marketing in drugs is checked by test purchases and regular collection of information on the supply position of essential drugs from the States. Government also propose to enhance penalties for manufacturing and selling spurious and sub-standard drugs. Such offences will be made cognisable.

91. This country has long been recognised as a rich store house of vegetable materia medica. Though indigenous drugs have been in extensive use, there has been no co-ordinated effort in research and standardisation of these drugs. It is necessary to lay down standards as regards quality and active principles. Then they should be processed in a form suitable for administration. Remedies suitable for adoption in the pharmacopoeia should be discovered. In order to achieve these objectives, the Indian Council of Agricultural Research has established a Medicinal Plants Committee to develop the cultivation of important medicinal plants at suitable centres. Uttar Pradesh and Kashmir are also taking steps in this direction. The Ministry of Health has established a pharmacognosy section of the Central Drugs Research Laboratory for the identification of indigenous drugs, and for detecting adulteration of crude drugs in the market. Samples of fifty commonly used drugs collected from markets all over India have been investigated in the Drugs Research Laboratory in Kashmir and found to be spurious imitations of the genuine commodities. As a preliminary to the control of these drugs, their pharmacognostic and chemical standards should be established. The Council of Scientific and Industrial Research has established a Drug Research Institute at Lucknow. This Institute will investigate many of the commonly used indigenous drugs to work out their active principles and standards of potency and purity. The need for a national pharmacopoeia has been a long-felt want. The Government of India established a committee for the preparation of the pharmacopoeia. The pharmacopoeia will contain monographs not only on modern synthetic and other drugs but also on all vegetable drugs of indigenous origin. So far nearly a thousand draft monographs have been prepared.

92. Homoeopathic medicines are not prepared according to well-known pharmacopoeia methods. Moreover, these drugs are used in such diluted forms that they cannot be tested or standardised by any known chemical process. The only precaution that could be taken is to allow the manufacture and preparation in bonded laboratories under the supervision of qualified Homoeopaths.

93. The Pharmacy Act has been enforced in all Part 'A' States. Steps are being taken to enforce it in Part 'B' and Part 'C' States. Registration tribunals have been constituted by the State Governments and registration of pharmacists is under way. Educational regulations prescribing the minimum standards for pharmacists have been prepared. The Pharmacy Act should be effectively implemented in all States.

94. Private enterprise in drug manufacture in India started just after the World War I, though a beginning was made nearly 50 years ago. At the beginning of World War II, owing to restriction on imports the full resources of the country had to be developed. The Government of India gave all help to the manufacturing industry. Today India is self-sufficient in regard to all the galenical preparations, most of sera and vaccines, liver extracts, alkaloids like morphine, codeine, strychnine, etc. India is also self-sufficient in regard to the production of santonine, belladonna, digitalis and hyoscyamus preparations. India has made little or no progress in regard to production of basic chemicals required for the manufacture of synthetic remedies and chemo-therapeutic compounds largely used in the country. A few synthetic drugs are produced in small quantities, e.g. P.A.S., Novitron, Lumina,

(Phenobarbitone), Para-acetylamino benzaldehyde thio semi-carbazone etc., which meets only a fraction of the demand. India imports essential drugs and raw materials valued at over Rs. 10 crores annually. Among them are principally penicillin, streptomycin and other antibiotics, sulpha drugs, gland products, vitamins, anti-leprosy drugs and insecticides. These are the most important items and if steps are taken to implement the production of the basic chemicals and raw materials required for these and for the production of the finished products, the import of drugs will be considerably curtailed and India will be fairly on the way to self-sufficiency. We may now consider the production of those drugs to which a high priority should be assigned.

95. West Bengal and Madras produce about 1,00,000 lbs. of quinine per year. The production should be expanded to 1,50,000 lbs. to make up the gap between production and consumption. Government have appointed a special Cinchona Committee for the purpose of investigating the problems of Cinchona industry. Their report is expected shortly. Any enterprise proposing to produce synthetic anti-malarial drugs in the country should be given all facilities. The production of D.D.T. at rates comparable to foreign prices to the extent of about 5 or 6 thousand tons should be the target for the plan period. There is a proposal under way for the setting up of a D.D.T. factory, with the assistance of the W.H.O. and the U.N.I.C.E.F., for the production of 700 tons with capacity for expansion upto 1,400 tons. The setting up of another plant of the same capacity is essential to meet the requirements of a national malaria control programme and the target of production indicated. This is proposed under the T.C.A. programme.

96. Very nearly 35 per cent of the total value of imported drugs is in the form of antibiotics consisting of penicillin and streptomycin. The estimated consumption of penicillin is 8 million mega units per annum, which is wholly imported. The Indian Penicillin Committee have started a bottling plant at the Haffkine Institute, Bombay, where penicillin is imported in bulk. Government of India have entered into an agreement with the U.N.I.C.E.F. to set up a factory for the manufacture of penicillin and other antibiotics. The total cost of the project is estimated at Rs. 2.00 crores. The plant will be located at Pimpri near Poona. The production of penicillin at the rate of 4,00,000 mega units per month is expected by the end of 1954. Provision has also been made for the development of an important centre of research and training in the antibiotic field. Certain commercial firms are also engaged in importing penicillin in bulk and bottling it.

97. Sulpha drugs should have a high place in the priorities for self-sufficiency. The volume of their requirements is very large. Private enterprise is entering the field for the production of sulpha drugs.

98. Diaminodiphenyl sulphone is being manufactured by some Indian firms. It is claimed that a process has been evolved by which the cost of production would be considerably reduced. The basic materials required for the preparation of this drug are said to be all available in India.

99. Among the glandular products, insulin takes rank as one of the most important, as it is necessary for the treatment of diabetes. It is now wholly imported. It is understood that an Indian firm has under consideration a project for manufacturing insulin with foreign technical assistance.

100. The need for the development of industries for the production of vitamins, food yeast, shark-liver oil has been stressed in the section on nutrition. There is a need for a co-ordinated programme of development of the pharmaceutical industry. Production of hospital equipment, surgical instruments, and dressings, and glass containers should receive attention and necessary aid.

VITAL STATISTICS

101. Vital statistics constitute the foundation on which all constructive work in the field of public health must be built. Preventive and curative work can be organised on a sound basis only on accurate knowledge of mortality and morbidity statistics. The application of modern statistical methods to health administration is of supreme importance. It is necessary both for ensuring the collection of data on sound lines and a study and interpretation of the recorded statistics. Investigation of socio-economic factors in relation to community health and disease, the survey of health problems and the evaluation of the measures taken require the application of statistical methods. An adequate statistical service is required for the collection and compilation of vital and population statistics and the census.

102. The collection and compilation of vital statistical data are defective in completeness and accuracy. The agency for the collection of vital statistics in municipalities is a part of the municipal public health department. As regards rural areas the agency varies in different States. The recorded vital statistics are passed on through a series of officers to the Director of Public Health and compilation of the data is carried out at different stages of transmission in most cases. The collection and compilation of vital statistics is now to be a function of the Registrar General and Census Commissioner. The Registrar General has reviewed the recommendations of the Bhore Committee and the Vital Statistics Committee and has proposed a scheme. The scheme consists of an annual review of population records and annual census of sample house-holds. The data collected by these two operations and those yielded by the normal registration of births and deaths are to be centrally compiled, tabulated and studied and on the basis of such studies population reports are to be prepared and published every year. The organisation required for this purpose would consist of a central office of the census of India under a Registrar General and ex-officio Census Commissioner, branch offices of the Census of India each under a Superintendent of Census Operations and agencies of each State Government *viz.*, a Director of Population Records for each State with necessary office staff and an organisation in each district consisting of chief Registration Officers, Registration Supervisors, Registrars and Additional Registrars, all appointed on an ex-officio basis. House to house visits and enquiries are proposed to be organised annually in order to effect 'Rotational Revision of the National Register' and the 'Annual Census of Sample House-holds'.

The expenditure incurred is to be shared equally between the Centre and the State concerned. The total cost of the entire scheme can be limited to Rs. 30 lakhs per annum.

103. Though the Registrar General is to be in charge of the vital statistical organisation, the health organisations have an important role to play, particularly through health personnel at district and local levels in providing accurate data of births and causes of deaths and in introducing the use of more exact terminology in reporting them. The health directorates at the Centre as well as in the States have got a distinct need for a statistical organisation to carry out certain types of statistical studies and investigations having a direct bearing on essential health problems with which they are concerned, besides the study and analysis of recorded statistics in medical institutions of various types and of health departments.

104. The application of statistical methodology to problems of health administration is a highly specialised scientific discipline and requires the services of highly qualified and well-trained statisticians. There is, therefore, a need for organising facilities for statistical training in universities not only in the theory of statistics but also in applied statistics in various specialised fields. So far as health statistics go, there is provision in the All-India Institute of Hygiene for such training. There is clearly a need for developing similar provision in other centres like the All-India Medical Institute. The satisfactory fulfilment of the functions of the Bureau of Health Statistics in the Directorates of Health Services would need modern mechanical aids. A provision of Rs. 9.25 lakhs for the purpose is made in the plan. Experimental pilot studies for the improvement of vital and health statistical data will be taken up along with population studies for which provision is made.

FAMILY PLANNING

105. The recent increase in the population of India and the pressure exercised on the limited resources of the country have brought to the forefront the urgency of the problem of family planning and population control. The application of medical knowledge and social care has lowered the death-rate, while the birth-rate remains fairly constant. This has led to the rapid increase in the growth of population. While a lowering of the birth-rate may occur as a result of improvements in the standards of living, such improvements are not likely to materialise if there is a concurrent increase of population. It is, therefore, apparent that population control can be achieved only by the reduction of the birth-rate to the extent necessary to stabilize the population at a level consistent with the requirements of national economy. This can be secured only by the realisation of the need for family limitation on a wide scale by the people. The main appeal for family planning is based on considerations of the health and welfare of the family. Family limitation or spacing of the children is necessary and desirable in order to secure better health for the mother and better care and upbringing of children. Measures directed to this end should, therefore, form part of the public health programme.

106. All progress in this field depends first on creating a sufficiently strong motivation in favour of family planning in the minds of the people and, next, on providing the necessary advice and service based on acceptable, efficient, harmless and economic methods. But

these presuppose (1) intensive studies about the attitudes and motivations affecting family size and techniques and procedures for the education of the public on family planning, and (2) field experiments on different methods of family planning as well as medical and technical research.

107. A programme for family limitation and population control should:

- (a) obtain an accurate picture of the factors contributing to the rapid population increase in India;
- (b) discover suitable techniques of family planning and devise methods by which knowledge of these techniques can be widely disseminated ; and
- (c) make advice, on family planning, an integral part of the service of Government hospitals and public health agencies.

A sum of Rs. 65 lakhs has been allocated by the Central Government in the Plan of the Ministry of Health for a family planning programme.

This programme includes:

- (1) The provision, in Government hospitals and health centres, of advice on methods of family planning for married persons who require such advice : Medical officers working at hospitals and health centres like maternity and child welfare clinics should give advice to women regarding family planning when such advice is necessary for health reasons. If a doctor feels that a woman patient cannot undergo again the strain of pregnancy and parturition without danger to health, it is obviously the duty of the doctor to give such advice as is necessary to enable the person to prevent conception. In these circumstances the doctor would be justified in suggesting any chemical, mechanical or biological methods of contraception or sterilization as may be indicated for the individual case. The giving of advice on birth control has been a procedure allowed by the Ministry of Health in U.K. in medical centres maintained by the local authorities.
- (2) Field experiments on different methods of family planning for the purpose of determining their suitability, acceptability and effectiveness in different sections of the population: If it can be demonstrated that our people, particularly those living in rural areas, can be educated to accept the rhythm method and use it as a practical method of limiting family growth, Governmental support should be extended to the propagation of this method. From the point of view of avoiding enormous expenditure as well as that of securing the ethical values that community life would gain by the self-imposed restraint which the rhythm method involves, it would seem desirable to try out this method fully and thus ascertain its practicability. Whether the rhythm method is capable of wide application in the community with adequate results or not, actual experimentation alone can tell. Research and experiments need not however be confined to a single method. There are numerous voluntary agencies which are currently propagating the spread of information on family planning and the use of chemical and mechanical contraceptives. Their activities would need support.

- (3) Development of suitable procedures to educate the people on family planning methods : Inexpensive means of rapidly educating the public in matters relating to family size will have to be evolved if large-scale reduction in the national birth-rate is to be obtained. Scientific techniques are available to assess the effect of mass educational campaigns. These techniques should be used to develop educational programmes suitable for the different economic and social sections of the population.
- (4) Collection, from representative sections of the population, of information on reproductive patterns, and on attitudes and motivations affecting the size of the family : The reproductive pattern in any population is largely determined by social and cultural factors which may differ from one area to another. A thorough investigation of the differences in attitudes and motivations towards family size and of the factors responsible for producing such differences is important. Research along these lines is necessary if we are to understand the particular sentiments and aspirations to which programmes of family limitation in various sections of the population should appeal.
- (5) Study of the inter-relationships between economic, social and population changes. The information obtained by such studies will form the necessary background for the formulation of a national population policy and the development of appropriate measures for population planning based on factual information.
- (6) Collecting and studying information about different methods of family planning (based on scientifically tested experience in India and abroad) and making such information available to professional workers.
- (7) Research into the physiological and medical aspects of human fertility and its control.

108. It is considered that the problems of population and family planning may be divided into those relating to:

- (1) policy and approach, and
- (2) research and programmes.

Two committees have accordingly been constituted. It would also appear desirable to set up at a later date a population commission to assess the population problem, consider different views held on the subject of population control, appraise the results of experimental studies and recommend measures in the field of family planning to be adopted by the Government and the people.

CHAPTER XXXIII

EDUCATION

I. GENERAL

EDUCATION IS of basic importance in the planned development of a nation. The educational machinery will have to be geared for the specific tasks which the nation sets itself through the Plan so as to make available in the various fields personnel of suitable quality at the required rate. The educational system has also an intimate bearing on the attainment of the general objectives of the Plan inasmuch as it largely determines the quality of the manpower and the social climate of the community. In a democratic set up, the role of education becomes crucial, since it can function effectively only if there is an intelligent participation of the masses in the affairs of the country. The success of planning in a democracy depends also on the growth of the spirit of co-operation and the sense of disciplined citizenship among the people and on the degree to which it becomes possible to evoke public enthusiasm and build up local leadership. It is essential for the successful implementation of the Plan that the educational programme helps to train the people to place responsibilities before rights and to keep the self-regarding outlook and the force of the acquisitive instinct within legitimate bounds. The educational system should also satisfy cultural needs, which is essential for the healthy growth of a nation. The system should stimulate the growth of the creative faculties, increase the capacity for enjoyment, and develop a spirit of critical appreciation of arts, literature and other creative activities. The fulfilment of the objectives mentioned above, will lead to the development of an integrated personality in the individual, which should be the first and foremost aim of any system of education.

2. The lines of future reorganisation have become clear in many directions as a result of the deliberations of various committees and commissions set up in recent years and the pioneering work of private institutions. The Planning Commission is mainly concerned with viewing education as a part of the total national effort, establishing and strengthening its links with other aspects of national life and assigning priorities for the various educational programmes awaiting implementation.

ASSESSMENT OF PRESENT POSITION

3. An analysis of the existing situation reveals the following features that need special attention :—

(1) Considering the size of the population, the overall provision of educational facilities is very inadequate. They are provided for only 40·0* per cent of the children of the age-group

*Figures are provisional.

6.11 and 10.0* per cent of the persons of the age-group 11-17 and 0.9 per cent of those of the age-group 17-23. The directive of the Constitution, however, is that free and compulsory education should be provided for all children up to the age of 14 within ten years of the commencement of the Constitution. This will necessitate expansion of facilities at higher levels also as more and more students pass out of primary schools. The literacy percentage of our population is 17.2* which is only a very rough measure of the huge task lying ahead in the field of social education. Similarly facilities for technical education need to be considerably expanded to meet the needs of the country adequately.

(2) The overall structure of the educational system is defective in many ways, one of which is that it is top-heavy. Although the provision at the secondary stage is properly proportioned to that at the primary stage, that at the university stage is larger than the base structure can profitably support. This is revealed also by the distribution of educational expenditure among the various stages. In 1949-50, for example, the direct expenditure on primary schools was only 34.2 per cent of the total educational expenditure, whereas a sound and properly proportioned system of education requires that the major share of this expenditure should be incurred on primary education. The emphasis on primary education needs to be very considerably increased during the period of the Plan, which would necessitate a corresponding increase in secondary education during the next stage of our development, though some expansion would be inevitably required even during the present period to cope with the increased demand for teachers for the large number of schools at the primary stage that would come into being. In view of the decision of the Government to adopt the basic pattern at this stage, the need of teachers for these schools will require expansion of facilities at the secondary stage on post-basic lines. Otherwise, however, both in the field of secondary and university education, the general problem is one of consolidation rather than expansion, except in certain fields like Agricultural and Technical High Schools at the secondary stage and Public Administration, Social Service Administration, Business and Industrial Administration, etc., at the university stage—where provision is non-existent or insufficient. Another reason is that the recent expansion in these fields has not always been on a sound basis with adequate provision of teachers, equipment, etc., which has unduly lowered standards.

There are grave disparities between different States in the matter of provision of educational facilities. The expenditure on education compared to total revenues and population also varies in different States. The internal distribution of expenditure should be so arranged and Central grants should be so dispensed that at least the serious inequalities between States tend to disappear.

Educational facilities are not properly distributed between urban and rural areas. Whereas 82.8 per cent of the population live in rural areas the percentage of the total number of pupils in recognised primary, middle and high schools that were studying in rural areas in 1949-50, was 60, 67 and 26 respectively. The respective percentages in 1937-38 were 82, 72 and 28. At the university level facilities are practically non-existent in the rural

* Figures are provisional.

† It is very difficult to estimate the indirect expenditure.

areas. Expenditure on recognised educational institutions in rural areas fell from 36 per cent of the total expenditure in 1937-38 to 30 per cent in 1949-50, although the total expenditure on education in rural areas had considerably increased.

There is lack of balance between provision of facilities for different sections of society. The problem of backward tribes and scheduled castes is dealt with under Social Welfare. Of special concern in this regard is the neglect of women's education. Whereas women constitute nearly half the population the girl pupils in the primary, middle and high school stages in 1949-50, were only 28, 18 and 13 per cent respectively of the total number of pupils studying in these stages. In universities and colleges*, for the same year, girls were only 10·4 per cent of the total number of students. At the primary stage, most of the States have not found it feasible to have separate schools for girls, and the only remedy lies in propaganda among parents to remove their prejudice against co-education in primary schools. Co-education at the middle and high school stages may not be feasible in the present state of our society, and emphasis would need to be laid on the development of middle and high schools for girls. Girl students should also be encouraged to take to higher studies by free-studentships and scholarships.

The various stages of the educational system are not clearly and rationally marked out. The duration and standards of the primary and secondary stages vary considerably in different States. The relationship of basic education with ordinary primary education and that of post-basic education with existing secondary education has not been clearly defined. Again, while most of the students finish their educational career at the close of the primary stage in the first instance, and then at the end of the secondary stage, none of these stages is complete by itself. The proper definition and integration of the different stages and branches of the educational system are an urgent necessity.

(3) Another disturbing feature of the situation is the large wastage that occurs in various forms at different stages of education. At the primary stage quite a large number of pupils discontinue their studies even before obtaining a state of permanent literacy. Of the total number of students entering schools in 1945-46 only 40·0 per cent reached class IV in 1948-49. The expenditure on the remaining 60·0 per cent was largely wasted. The experiment of compulsion, which is generally regarded as the only remedy for improving the position, has not made much progress. In 1948-49 approximately only 115 lakhs pupils were under compulsion and most of the States expressed their inability to enforce it. The problem of 'stagnation', that is, where a pupil spends a number of years in the same class, is also serious. There is, moreover, incomplete utilisation of existing facilities, as is shown by the unsatisfactory results of a large number of students. This wastage is largely due to the poor quality of teaching as well as faulty methods of education. Another form of wastage is the unplanned growth of educational institutions.

The absence of adequate facilities for technical and vocational education results in a much larger number of students going in for general education than is justified by the requirements of the country or the tastes and aptitudes of the pupils. The undue emphasis on the academic and theoretical aspects of education retards the development of the practical sense,

* Includes students of Boards of Intermediate Education.

initiative and resourcefulness among large numbers of students. One result of this is that educated people tend to depend too much on employment by Government or commercial concerns, which can absorb only a limited number. This also leads to undue strain on the resources of universities as students, on the completion of secondary education, tend to drift to universities in the absence of any other alternative. Education should, therefore, be given a more practical bias from the very beginning and at the post-secondary stage there should be greater adjustment between the needs of the country and the output of educational institutions.

(4) The position in regard to teachers is highly unsatisfactory. A very large percentage of them are untrained. In 1949-50 the percentage of untrained teachers was 41·4 per cent in primary schools and 46·4 per cent in secondary schools. For purposes of educational reorganisation most of the trained teachers will also require considerable retraining. Expansion of training facilities, therefore, deserves very high priority.

Another feature of the situation is the dearth of women teachers, who are especially suited, for *balwadis* (including pre-schools and day nurseries) and primary schools. To remove this shortage, facilities for part-time work in schools should be provided for married women, who cannot devote their whole time to the profession. Indigent women should also be trained as teachers.

The scales of pay and conditions of service of teachers are generally very unsatisfactory and constitute a major cause of the low standards of teaching.

(5) The high cost of education, especially at the university level, prevents many an intelligent student from proceeding to higher studies. The provision of free-studentships and scholarships needs to be considerably increased. It should be a principle of State policy that none who has the capacity to profit by higher education should be debarred from getting it. Since the limited economic resources of the State will place limitations on the implementation of this principle, facilities for part-time work by students to meet the expenses of their education should be developed to the utmost possible extent.

(6) The undue stress on examinations and memory work in the present system of education is not conducive to the development of originality or a spirit of research.

(7) Lack of facilities prevents institutions from building up the physical and mental health of students.

(8) There has been a general neglect of the study of our own culture with the result that the educated classes are often divided by a gulf from the mass of the people. The system of education should help in building up the cultural and political identity of the nation. Graded text books for the purpose of building up civic loyalties and creating understanding of democratic citizenship should be prepared.

(9) The meaning of planned development and the Five Year Plan needs also to be universally taught in our educational institutions and included in social education programmes.

4. Some attempts have been made to remodel the system in such a way as to suit our needs better. At the primary level the basic pattern has been accepted and a beginning has been made in the matter of opening new basic schools and converting some of the existing primary schools into basic ones. Some attempts have also been made to make secondary education more broad-based and practical. But, by and large, teaching continues on old lines and practically the entire task of remodelling the system still remains to be done.

5. Summing up, the needs of the present situation are :

- (1) re-orientation of the educational system and integration of its different stages and branches ;
- (2) expansion in various fields, especially in those of basic and social education, remodelled secondary education and technical and vocational education ;
- (3) consolidation of existing secondary and university education and the devising of a system of higher education suited to the needs of the rural areas ;
- (4) expansion of facilities for women's education, especially in the rural areas ;
- (5) training of teachers, especially women teachers and teachers for basic schools, and improvement in their pay-scales and conditions of service ; and
- (6) helping backward States by giving preferential treatment to them in the matter of grants.

RESOURCES

6. In the context of our needs, our resources are very inadequate. The Committee on the Ways and Means of Financing Educational Development in India estimates that a national system of education—providing education for 100 per cent of the children of the age-group 6-14, secondary education for 20 per cent of those coming out of the first stage, university education for 10 per cent of those passing out of high schools, technical education on a modest scale and other minor items—when it comes into full operation, will require an annual expenditure of nearly Rs. 400 crores. In addition, for basic and high schools only, approximately Rs. 200* crores will be necessary to train 27 lakhs of teachers, that will be required, and Rs. 272 crores for buildings. The total number of teachers in 1949-50 was about 7† lakhs, most of whom would require retraining to fit in the schemes of educational reorganisation. No authoritative assessment exists of our present resources in buildings but it is common knowledge that most of the buildings, at least of the primary schools, are very inadequate for the purpose for which they are used. In spite of considerable increase in the provision for education in recent years, the total educational expenditure in 1949-50 was only about Rs. 100 ‡crores.

*For basic teachers and teachers of junior departments of high schools Rs. 325 per year per trainee and for teachers of senior departments of high schools Rs. 400 per year per trainee has been assumed. The training period has been taken as 3 years.

†In primary and secondary schools

‡Figures are provisional.

7. The Five Year Plan makes a provision of Rs. 151·66 crores (35·02 crores for the Centre and Rs. 116·64 crores for the States) for educational development or of Rs. 30·33 crores per annum. This average indicates an increase of 55 per cent over the development expenditure in 1950-51 which was Rs. 19·55 crores for the Centre as well as the States. The inadequacy of this provision is all too obvious. It is also obvious that the gap between needs and resources available, or likely to be available, cannot be covered from the State finances alone. And yet it has to be recognised that the provision of a certain minimum of education to all citizens within a reasonably short period of time is an essential pre-requisite, next only to food, for the successful implementation of development programmes and survival of democracy in India. It is extremely urgent, therefore, that all other possible sources of help should be discovered and fully utilised.

8. In the context of prevailing conditions a larger share of responsibility for social services will have to be borne by the people themselves. In the case of education there is evidence that the people are keen to contribute in cash, kind, labour or land for creating the necessary facilities. It should be a major aim of the Central and State Governments and non-official organisations to explore this avenue and harness this urge in the people, by using their influence, judiciously providing technical aid and grants, and stimulating a spirit of emulation among local communities. The school should become a focus for the joint endeavour of the community and the hub of its social, cultural and economic life. This approach can take different forms from putting up a building, supplying furniture and equipment, making contribution in cash or kind at the time of the harvest or labour in the off-season, to taking up responsibility for running the school as their own. It is possible to visualise the village community as not merely supplying adequate land but also digging wells and supplying bullocks, seeds, manure, implements and labour for cultivating the land so that its produce is a net profit to the school which can be used for running it and the many social, cultural and other activities of the community that would grow round it. The village community has experience of this mutual-aid activity for their own farming needs. Its administration will, therefore, not require any specialised organisation. This will give opportunity to the constructive workers, the members of the Bharat Sevak Samaj and Panchayats and will introduce a series of activities so essential for creating and maintaining interest, confidence and initiative in the local community. It will give the administrator—with his influence, organisational capacity and experience—scope for constructive leadership amidst the routine of his work. Besides mobilising the help of the local community for the cause of education, every attempt must be made to develop the productive aspect of basic and social education.

PRIORITIES

9. The paucity of our immediate resources makes it imperative that our programmes be selected according to a careful system of priorities, so that the most urgent needs may be met and the most effective use made of the money spent. In view, however, of the varying needs and resources of different parts of the country and the differences in their general

and educational development, these priorities can be indicated only in broad outlines. The importance of the educational programme in the general plan of development lies in the fact that it is only through a properly organised educational approach that the personnel of the requisite calibre at various levels, required for the implementation of the Plan, can be trained and made available. This requires, firstly, the improvement and strengthening of existing institutions and secondly, the expansion of facilities on a considerable scale as and when resources become available.

10. The various stages of education are, however, so closely interlinked that it is not possible to lay down any strict order of priorities amongst them, so far, at any rate, as the improvement of the existing facilities is concerned. Better primary or basic education depends on better teachers, who can only be supplied if standards of secondary education are greatly improved, and this, in turn, depends on the provision of better teachers, who are educated in the universities and are prepared for their profession in the training colleges. That is why it is necessary to ensure that there is a general advance and improvement on all fronts.

11. Subject to these remarks, however, it may be stated that side by side with the consolidation and improvement of existing facilities, high priority should be given to experiments and research in improved educational methods; to the training of teachers; to the preparation of literature for teachers, children and adults; to providing adequate facilities for basic and social education; and to developing, to the fullest possible extent, the facilities for technical and vocational education at lower levels, as well as for training high grade technicians in certain selected fields. In the field of university education, high priority should be given to the improvement of standards and the development of post-graduate work and research.

12. In the context of the remarks made above, the Commission is of the view that in the educational development envisaged, a serious attempt should be made to achieve the following broad targets in the various sectors, subject to such modifications as may be required to suit local conditions :—

- (1) At the conclusion of the Five Year Plan, educational facilities should be provided for at least 60 per cent of all the children of the school-going age within the age group 6—11, and these should develop, as early as possible, so as to bring children up to the age of 14 into schools in order to cover the age-group 6—14, which should be regarded as an integral whole for the purpose of providing basic education. The percentage of girls of the school-going age (6—11) attending schools should go up from 23·3 per cent in 1950-51 to 40 per cent in 1955-56.
- (2) At the secondary stage*, the target should be to bring 15 per cent of the children of the relevant age-group into educational institutions. The percentage of girls of this age-group attending schools should go up to 10 per cent.

* The 1950-51 provision for the age-group 11—17 was roughly 11 per cent.

- (3) In the field of social education, we should envisage that at least 30 per cent of the people (and 10 per cent of women) within the age group of 14 to 40 receive the benefit of social education in the wider sense of the term.

No targets have been laid down for the university education as the problem here is mostly one of consolidation rather than expansion. It is, moreover, not possible to determine quantitatively the progress in higher education with the same ease as in the case of earlier stages.

We estimate that with State resources alone the country will be able to provide schooling facilities for 55·7 per cent of the children of the age-group 6-11 and 13·3 per cent of those of the age-group 11-17. The gap between these figures and our targets, stated earlier, will be bridged by the development and utilisation of local resources and the productive capacity of students by the introduction of crafts in schools.

AGENCIES

13. *Role of the Central Government*—Educational programmes are carried out by the Central Government, the State Governments, local bodies and private agencies. According to the Constitution, education is primarily the concern of the States. The Central Government have special responsibility in certain fields which have been clearly defined in List I of the Seventh Schedule and share responsibility with the State Governments in certain other fields also enumerated therein. It is, however, generally recognised that the Centre has also an overall responsibility for helping, co-ordinating and guiding the work of the States so that national policies can be evolved and satisfactorily worked out. In view of the shortage of funds, the Centre has so far not been able to do much in this direction. In spite of the substantial improvement, which the Plan makes in this respect, the total resources available with the Centre still remain inadequate and call for the utmost care in their disposal, in order to obtain the maximum results. Except for helping especially backward States, we feel, that in the field of pre-university education, it would be very difficult at present for the Centre to undertake responsibility for expansion. It should confine itself to helping, on a contributory basis, those States which are willing to co-operate in certain activities of national significance like research in techniques, training of especially selected personnel, production of literature, conducting pilot experiments, etc. Similarly in other fields, where the Constitution does not lay down a definite responsibility on the Centre, grants-in-aid should be related to specific schemes, and an adequate machinery set up to see that the grants are actually spent for the purpose for which they are meant. At the university level the setting up of a University Grants Commission has already been recommended. The work of guiding and co-ordinating technical education in the country is performed by the All-India Council for Technical Education. Similarly it is necessary to have an expert body at the Centre to guide and co-ordinate work in the States in regard to basic, social and secondary education, especially at this stage when much pioneering work remains to be done. This body should also frequently assess the work done in different States and publicize the results. In this way sound foundations would be

laid for the expansion programme when more funds become available. Another very important activity, not especially mentioned in the Constitution but which the Centre has to take up, is the promotion of the federal language.

14. *Role of local bodies*—The question of the relationship between the State Governments and local bodies arises mostly in the field of primary education. In this field a recent committee of the Central Advisory Board of Education has examined the problem and its recommendations are under consideration by the various State Governments. In order to secure maximum local help and co-operation and to build education closely round the life of the people, progressive decentralisation in the administration of education at lower levels should be effected as conditions become more and more favourable. Care should, however, be taken to ensure broad uniformity of educational policy and efficient and impartial administration.

15. *Role of private agencies*—Private agencies have always an important role to play in a democracy. In India where till recently they have had the major share of responsibility for welfare activities, they occupy a special place. Private agencies are generally able to manage things more cheaply than Government, for they are able to appeal more effectively to the idealism of workers and are comparatively free from red tape. In view of these considerations and the fact that mobilisation of the efforts of the entire nation is necessary to meet the situation in regard to education, for which private agencies are especially fitted, it should be an item of priority in the Plan to help such agencies to develop their capacity fully and to function effectively. Both the Central and State Governments have schemes for helping private agencies.

2. PRE-SCHOOL EDUCATION

16. The highly impressionable, plastic and educationally potent period of a child's life preceding the age of six, when compulsion begins, has been neglected in India although it is all the more important in this country in view of the extremely depressing conditions of home life in most cases. The existing schools are mostly concentrated in the towns and cater for the children of the richer classes while the need of the rural areas and of industrial labour, which is very much greater, is almost completely neglected.

17. In view of the shortage of funds, Government can accept only limited responsibility in this field, confined to research in evolving methods suited to our needs, training of teachers, helping private agencies, who take up this work in the rural areas, by grants-in-aid and running a few model *balwadis* or nursery schools in each State. In labour areas, it should be the responsibility of industry to make provision for such schools. In other areas the major burden of organising and running *balwadis* should be borne by local bodies. Where resources do not allow the opening of fulltime institutions, day nurseries, working for a few hours in mornings and evenings, should be organised by voluntary workers. Where buildings are not available seasonal open-air nurseries may be organised.

3. PRIMARY (INCLUDING BASIC) EDUCATION

18. The provision of free and compulsory primary education, is the first necessary step towards establishing equality of opportunity for every citizen. At this stage, we deal with the entire future human resources of the country and, if it is properly handled, a way can be found for the full development and the most effective use of these resources.

19. *Basic education*—A most important development in the field of education in recent years has been the acceptance of basic education by the country as the pattern for the education of children of the age-group 6-14. Work in this direction, however, has only just begun. It has, moreover, varied to such an extent in the matter of approach and quality in different places that it is impossible to get an idea of the work done from statistics alone. This confusion should, however, disappear after the clear lead given by the Central Advisory Board of Education in March, 1952, when they enunciated: "A system of education cannot be considered as basic education in the real sense unless (a) it provides an integrated course, including both the junior and the senior stages, and (b) places adequate emphasis on craft work in both its educational and productive aspects". The broad framework of basic education has been worked out and given inspiring expression at some places. But it has to be recognised that many of its details remain to be worked out and we are far from having fully developed the potentialities of basic education.

20. The foremost task in the field of basic education is the improvement of technique and the development of methods, by which it can be passed on to the vast majority of teachers of rather low educational qualifications and average ability. To this end at least one group of model basic institutions should be opened in each of the Part 'A' and 'B' States and in Delhi among part 'C' States. Each group should consist of a number of pre-basic and basic schools, a post-basic school, a teachers' training school and a teachers' training college. These institutions should be located near each other. One of their important tasks will be to develop a spirit of self-help and co-operation in the school community as well as to work for an allround reconstruction of the community around. In addition, a few experimental basic schools should also be opened in urban areas to discover necessary modifications of the basic system, as it has been worked out in the rural areas, to make it suitable for urban areas as well.

21. Our experience of basic education hitherto is very limited. Even so, as the recent inquiry conducted in regard to its productive aspect by the Ministry of Education shows, wherever the scheme has been given a fair trial it has yielded encouraging results in spite of serious handicaps. The stage has arrived for a thorough investigation of the obstacles in the way of the full development of the productive capacity of basic education, as far as that can be done without sacrificing educational interests, and a determined effort to remove them. Any success in this direction would help in the spread of free and universal basic education for the people.

22. The States have hitherto tried to run mostly basic schools of five classes which are truncated units not only economically but also educationally. We would recommend that all States should run, wherever conditions permit, eight-year full-fledged basic schools instead of five-year schools. The experience of Bihar indicates that hardly any additional recurring expenditure would be involved in adding the three senior classes.

23. Insufficient attendance seriously affects the productivity of most basic schools. The remedy does not lie merely in compulsion. The positive approach to the question is to improve the economic condition of the villager. The burden on him of supporting the child should be lightened by providing in schools free lunch, wherever possible, and by organising voluntary work outside school hours to enable pupils to produce essential consumable or marketable articles. Holidays should be so timed that labour of children is available to their parents in the busy season. The practical aspect of basic education and its capacity to serve the community should be fully developed to convince the villagers of its utility and win for it their loyalty. The teachers should also be taught in training colleges to handle more than one class at a time. Perhaps the most important aspect of the question is the improvement of the quality of teachers.

24. Non-provision of adequate land, initial equipment and other capital expenditure are amongst other serious handicaps. Most of the schools have no land while others have an insufficient amount of it. Land, however, is necessary to develop agriculture-centred basic schools and to introduce kitchen gardening in other schools. The report of the Ministry of Education on the productive aspect of basic education, referred to earlier, estimates that the total amount required for basic schools, for all the children of the age-group 6-14, and training schools, for training the necessary number of teachers for them, will be 31,46,460 acres which is only 0.99 per cent of the total cultivated area in India. Difficulties of procuring land have to be faced at the local level. We would suggest the following measures to solve them :—

- (i) Basic schools should be opened, or existing primary schools converted into basic schools, preferably in those places where the local inhabitants are prepared to donate at least five acres of land and the local community, or the State, provides initial equipment and other capital expenditure. The experience of Bihar, where basic education has been given a comparatively fair trial over some period, proves that gifts of land for basic schools can be easily secured. The social education programmes of the State Governments can prepare ground for such donations.
- (ii) Wherever Government land is available or where Government come into possession of land, such as by the abolition of Zamindari estates, basic institutions should have a prior claim in the surplus land.
- (iii) All Government demonstration farms should be used for training the staff of basic institutions.
- (iv) Wherever consolidation of holdings is undertaken, the needs of the local school for land should be taken into consideration in determining the extent of land to be reserved for the common needs of the village.
- (v) Government should simplify procedure for the transfer of land and provide the schools with necessary facilities and co-operation of the agricultural department for improving the land offered.

- (vi) Where land is not obtainable under any condition it may be rented.
- (vii) Collective labour under the supervision of teachers, as has been tried in the basic school at Vedchhi*, for example, may also provide a way out of the difficulty of procuring land.

Requisitioning of land should not be resorted to, except under very exceptional circumstances, as it creates strained relations between the school and those who are dispossessed in the surrounding area.

25. It has, however, to be recognised that very little experience has been gained about the problem of agriculture-centred basic schools. It is very necessary, therefore, to take up forthwith a few agriculture-centred schools as an object of special study by qualified people so that they can provide guidance for the rest.

26. The disposal of the products of basic schools is not properly attended to. It is too often forgotten that indifferent craft work is not only bad economics but also bad education. Arrangements should be made to carry out all the craft processes so that finished products are turned out from basic schools, either singly or a number of schools co-operating together. Quality and taste should be properly attended to and every attempt should be made to eliminate waste. Articles produced should be generally for consumption by the community of students and teachers and the local community. If production is properly planned, and the community spirit is developed, there should be no unsold surplus. When, however, this adjustment is not perfect, the services of the normal machinery for the disposal of cottage industry products should be available to these schools.

27. In view of the central place which the personality of the teacher occupies in the basic system, the selection and training of the large number of basic teachers required is one of the most baffling problems in spreading basic education. The methods of selection should be so devised as to give due weight to personal traits in the teacher like the love of children and rural areas, self-help, initiative, resourcefulness, etc., which constitute really the key to his success as a basic teacher.

28. In view of the heavy cost that will be involved in training the large number of teachers required, it is highly important to develop the productive capacity of training schools to the fullest extent possible, consistent with educational interests. That will also provide pupil teachers valuable lessons in self-help and resourcefulness. In view of the results obtained by some of the basic schools there are good prospects of achieving a fair amount of success in this regard in basic training schools and colleges.

29. The training of a large number of teachers, required within a reasonably short period of time, is a colossal task, which will need the closest co-operation of the Central Government, the State Governments and non-official bodies. Besides the services of basic education experts, the programme will require the services of allied departments like agriculture, animal husbandry, co-operation, etc., whose fullest co-operation should, therefore, be ensured.

*District Surat (Bombay State).

30. The training programmes should be split up into two parts, both proceeding side by side : one concentrating on quality, which can grow only slowly, and the other on those basic skills and knowledge like organised community living, craft work, etc., which can be imparted *en masse* in regional camps. The teachers trained by the latter method should continue to be trained on the job by guiding literature, by peripatetic teachers being posted in their midst for short periods, by holding short refresher courses, etc. To get the best out of the teachers, favourable atmosphere should be provided by giving a short course in basic education to all the officers of the department, so that they can guide the teachers with sympathy and understanding.

31. Buildings should be of the simplest possible type and, as far as possible, built out of local material and the free labour of the people. Government should help with technical advice for which the public works departments should experiment with cheap designs which can be constructed with locally available material. The response of the public in the matter of school buildings in many places shows what can be done by public co-operation. The procedure of giving building grants should, however, be so simplified that grants, which are meant to stimulate public effort, are not so long delayed as to damp it.

32. The precise nature of the administrative machinery will be determined by each State according to the prevailing conditions. In view of the past experience as well as the nature of basic education, however, we would recommend certain general considerations which, we feel, should be kept in view. Basic education being a new experiment, it is essential in the initial stages to create a strong nucleus by having a separate unit for it within the education department. Secondly, basic education should have the co-operation of all departments whose work is vitally related to basic institutions. The extent of the responsibility of each department in this regard should be carefully worked out. Attempt should be made to locate the headquarters, temporary or permanent, of the officers of the various departments at basic institutions, wherever possible. Thirdly, basic education, being a programme of community action, non-officials should be associated with it at different levels and local committees should have the largest powers possible, consistent with efficiency and broad uniformity of policy.

33. *Primary education*—As regards the question of ordinary primary education, we feel that, in view of the poor return from it, the tendency to open new primary schools should not be encouraged and, as far as possible, resources should be concentrated on basic education and the improvement and remodelling of existing primary schools on basic lines, as far as that can be done with the personnel available. Even where new primary schools have to be opened for any special reasons, the curricular content should generally be the same as for basic schools and the earliest opportunity should thereafter be taken to convert these schools into full-fledged basic schools. As an immediate step, craft teachers should be trained on a large scale and craft introduced in as many schools as possible. The conversion programme, as well as the programme of opening new basic schools, should be so conducted that other primary schools in the vicinity are also brought near the basic pattern. This is necessary not only to eliminate unhealthy rivalry between basic and ordinary primary schools but also to promote the development of a uniform system of education. It should, moreover, be preceded by the

education of the public in regard to the value of basic education. The question of improving pay-scales and conditions of service of teachers will be dealt with in a subsequent section. The question of improving buildings of ordinary primary schools has to be dealt with in the same way as indicated in para. 31.

34. Although State resources should be concentrated largely on basic education the people should be encouraged to provide themselves with whatever education they can with the co-operation of voluntary agencies. Students can make a substantial contribution if their efforts are properly mobilised. Properly directed children's clubs should also be formed to impart some of the essentials of education to children for whom regular school education cannot be provided.

4. SECONDARY EDUCATION

35. The Government of India has set up a Commission to examine the entire question of secondary education. We have, therefore, confined our remarks only to a few of the more important and wider considerations which should be kept in mind in formulating its pattern.

OBJECTIVES

36. In the first place, secondary education must be closely related to the psychological needs of the adolescents for whom it is being designed. Secondly, it should be vitally related to the existing socio-economic situation, to the directive principles of State policy laid down in the Constitution and the approved schemes for social and economic reconstruction. In order to equip the youth adequately for the needs of the existing socio-economic situation, it is necessary to give secondary education a vocational bias. At present this education is mainly academic and does not provide sufficient scope for adolescents with varying aptitudes, especially those with a marked practical bent of mind. Thirdly, secondary education should grow from the education that is being given at the primary stage, *i. e.*, it should be closely integrated with basic education and its essential underlying principles. There should be no wide variation in the method of teaching and curriculum of the basic and the secondary school. The planning of the secondary education must also have in view the creation of leadership in the intermediate level, because, for the majority of students, formal education comes to an end at this stage. To this end, suitable types of multilateral or unilateral schools offering parallel courses should be provided and the personnel for vocational guidance should be trained. The standards to be attained should be high enough, on the one hand, to make the majority of students whose education ends at the secondary stage to be efficient workers and, on the other, to enable the minority who proceed to higher education to profit from the instructions they receive at these institutions. In view of the role it has to play between the basic and the higher stage, the planning of secondary education requires considerable care and attention.

FINANCE

37. Regarding finance, capital expenditure should be provided partly by the State and partly by the local people. In the rural areas, the local people should help by providing land, free labour in the construction of buildings, etc. Simple living, based on self-help, should considerably reduce living expenditure in hostels. Economic activities like agriculture, cottage industries, small-scale industries, etc., should be encouraged—even from the wider educational point of view—and thereby help to recover at least a part of the recurring expenditure.

RELATIONSHIP OF POST-BASIC AND SECONDARY SCHOOLS

38. One problem which has to be immediately tackled is the relationship of post-basic and secondary schools. We feel that the same credit should be given to the products of the two types for equal years of schooling for purposes of inter-school transfers and going in for higher education. For purposes of employment and adjudging capacity for social service, however, the attainments of the different pupils should provide the data for assessing their comparative worth. Maintenance of detailed index cards should considerably help in this direction.

5. UNIVERSITY EDUCATION

39. The Ministry of Education appointed the University Education Commission, which reported in 1949, to examine the entire question of university education. The Commission has suggested comprehensive and far-reaching reforms. We have received valuable help from the Commission's report in framing our recommendations in the light of our resources and the over-all needs of the country.

40. The problem of the re-organisation of university education is really three-fold : the reform of the existing system to enable it to yield the best results it is capable of yielding, the building up of a new system (or systems) more suited to our national needs and the working out of the relationship of the various systems, while they exist side by side. In spite of their grave defects, the existing universities are the only repositories we have of the tradition of organised knowledge and the course of wisdom is to improve their working while we attempt to build a system or systems better suited to our needs.

REFORM OF THE EXISTING SYSTEM

41. *Finance*—The immediate difficulty that has to be faced in the reform of university education is that of finance. The financial position of most of the universities has worsened in recent years on account of the large increase in expenditure. A very large number of universities are running on deficit budgets and hardly any university has the funds for necessary development.

42. The sources of income other than grants-in-aid from Governments are drying up or like fees have already almost reached their limit. The financial burden of any improvement, therefore, that might be undertaken has to be borne mainly by the State.

43. While means should be found to strengthen the financial position of the universities to the extent that our resources allow, it is necessary to make the best use of available resources, for which we would recommend the following measures :—

- (1) A University Grants Commission after the pattern suggested by the University Education Commission should be set up. It should be one of its functions to see that the tendency to open new universities, without adequate finances, is resisted. Universities should not recognise new colleges until they are sure of their financial stability.
- (2) Economies should be effected and more satisfactory results obtained by the co-ordination of post-graduate work in the various universities, thereby preventing unnecessary duplication. This should also be the responsibility of the University Grants Commission when it is set up.
- (3) There is some room for economy in the running of universities, as revealed by the Report of the Reviewing Committee, appointed by the Government of India to examine the problems and difficulties facing the three Central universities and the ways and means by which Government can help them. The recommendations of the Committee should receive the careful consideration of all universities.
- (4) Residential life in hostels should be based on the maximum of self-help and the ideals of utmost simplicity should be inculcated among university students.

44. *Overcrowding in colleges*—Another very important problem is the serious overcrowding in most of the colleges, which makes individual attention, so necessary at this stage, simply impossible. We must develop and apply selective tests on a large scale so that nobody is allowed to go up for higher education who is not fit to profit by it. But, in order to be able to enforce this selection, opportunities should be provided to the large majority of students to find gainful employment by making pre-university education purposeful and complete in itself.

45. The above measures will, however, take time to produce any appreciable results. Immediate relief can be had by providing facilities for private study, through correspondence courses and radio lectures organised as far as possible by the various universities, and allowing students to take the various examinations privately. This will have the additional advantage of giving an opportunity for progress to those who have to enter life early.

46. The present practice under which a degree is the minimum qualification for a large number of even routine and clerical posts must change. Recruitment to the services should be by competitive tests, calculated to assess both aptitude and acquired knowledge, and in most cases, the non-possession of a degree should be no bar to taking the competitive examination. This will open out new avenues of progress for those who enter life early but who equip themselves subsequently through other methods. In certain services it may be advisable not to pitch the standards of academic qualifications high so that youngmen with the requisite aptitudes can be selected at an early age, say, at the end of the secondary stage, and whatever further training they require is given to them in institutions maintained by the departments themselves. Both these measures should make it unnecessary for many students to crowd colleges merely to get a degree for securing employment.

47. *Improving standards of teaching*—The most important factor responsible for the existing low standards of teaching is the poor scales of pay and unsatisfactory conditions of service of the staff employed. The question is discussed in paragraphs 120 and 121. In addition, the following measures are recommended for improving standards of teaching :—

- (1) Proper steps must be devised to remedy the existing state of affairs in universities where, in too many cases, power and position depend not on the quality of work a person puts in but on his capacity to manage votes in the various university elections.
- (2) The number of working days should be increased to at least 180, exclusive of examination days. The continuity of studies is too frequently broken by casual holidays. A continuous period of study, followed by a continuous period of holidays, is desirable. That would give students the opportunity to engage in part-time work if they so desired and enable college authorities to provide other activities for students such as study tours, work camps, etc.
- (3) The system of inviting guest speakers on an honorarium may make the services of some good teachers available without much additional cost, especially in big towns and cities.
- (4) In order to develop a more balanced outlook and personality and habits of co-operation and self-help, students should engage themselves in such activities as community cleaning, making and repair of roads within the college compound, gardening, visits to the country-side and slum areas, etc. These activities will have the additional advantage of reducing the cost of maintaining a college.
- (5) Another reform which is very urgently needed and should be considered in all its bearings is the raising of the age-limit of admission to universities.
- (6) An atmosphere of discussion and free thinking should be encouraged through seminars, teachers' and students' camps, etc.

- (7) Steps should also be taken to correct the one-sidedness of present university education so that arts students have basic scientific knowledge and science students the essential knowledge of the humanities.

48. *Control of universities*—The control of universities leaves much to be desired. Apart from the evils of the teacher-politician, who has come up as a result of the introduction of democratic control in universities, they are subjected to unhealthy outside influences which nullifies their autonomy. Except the three institutions directly administered by the Central Government, universities are a State subject, and consequently the all-India aspects are apt to be neglected. There is great disparity in the quality of administration in different universities. The functions of the University Grants Commission should, therefore, also include the ensuring of minimum standards of teaching and internal administration in the various universities and the securing of proper attention for the national aspects of university education.

BUILDING UP OF A NEW SYSTEM—RURAL UNIVERSITIES

49. The urgent necessity of providing higher education to the rural areas is obvious. To meet this need, the University Education Commission has recommended a new pattern under the name of rural university. The Central Government should help to establish, during the period of the Plan, at least one such university, wherever the earlier stages of basic education, out of which it has to grow, have been worked out. Apart from serving the villages, the experience gained in the working of rural universities is likely to be useful in affecting certain necessary reforms in our existing universities, thereby enabling them to serve the national needs more effectively.

RELATIONSHIP BETWEEN EXISTING AND RURAL UNIVERSITIES

50. The rural universities that may be set up will have to pass through a period of experimentation, during which it is essential that they should have free scope for development. In order not to place the products of these institutions at a disadvantage, the degree of the rural universities should have as much validity in the matter of public appointments as those of older universities.

6. SOCIAL EDUCATION

51. The concept of adult education, which was mostly confined to literacy, was found to be too narrow to be able to meet the various needs of the adults. It was, therefore, widened to include, in addition to literacy, the health, recreation and home life of the adults, their economic life and citizenship training ; and to denote this new concept the term 'social education' was coined. Social education implies an all-comprehensive programme of community uplift through community action. External aid may be there but only to stimulate

and not to replace, community effort. The importance of such a programme is obvious. It should not only make our limited resources much more effective, but also build up a self-reliant nation. In a country, where nearly 80 per cent of the population are illiterate, democracy will not take root until a progressive programme of primary education trains up a generation fit to undertake its responsibilities. Even the programme of primary education is considerably handicapped without a corresponding programme of the education of adults.

ASSESSMENT OF THE PRESENT SITUATION

52. The work in the field of social education has been mostly confined to literacy. As a result of the work in recent years, especially during 1937-39 and since 1949-50, the literacy percentage increased from 8.3 in 1931 to 17.2* per cent in 1951. Most of the post-literacy work is done through libraries though, due to the dearth of suitable literature, the library movement has not made much headway in the villages. Recently the importance of recreational and cultural activities in programmes of social education has been increasingly recognised. Our cultural agencies like dance, drama, puppet show, fairs and festivals, *bhajan*, *kirtan*, etc., have been used but without any systematic attempt being made to gauge, develop and fully exploit their potentialities for mass education. Fairs and festivals had a meaning in olden times. They have, however, to be reinterpreted and modified to fit into the modern context and become live and full of meaning to the people today. Modern means of mass communication like the film and the radio have attracted much greater attention but, on account of their heavy cost, their use has been very much limited. Attempts have also been made in a few institutions to improve the economic condition of the villagers by teaching them improved crafts and agriculture. Very good all-round social education work has been done by some of the basic institutions. Co-operatives have also been developed as an agency of social education.

THE APPROACH

53. The approach to the problem has to be determined in the light of our resources and the magnitude of the task ahead. The total expenditure on social education in 1950-51 was Rs. 83.45 lakhs. The average annual expenditure visualized in the Plan is Rs. 3.02 crores. We would, however, require an average annual expenditure of Rs. 27† crores for the next ten years to make everybody literate and give him in addition, a veneer of social education in the larger sense of the term. The situation, therefore, calls for a most carefully planned approach. At the national level, priorities in the programme of social education should be determined by the overall national priorities, thereby not only winning for it the enthusiasm and support of the country at large but also making it directly productive, as it would enable the human factor to respond fully to the national plans of development.

*Figures are provisional.

†Pamphlet No. 79—Bureau of Education, P. 113—Scheme (b).

Organization of co-operatives, agencies of village development, co-operative farming, agricultural extension work, etc., are priority tasks in the Plan. We would, therefore, recommend that social education should be based on them. That is to say, in handling these activities utmost attention should be paid to inculcating in the adults right individual and collective habits, and the knowledge of various subjects should be correlated to every step involved in these activities, thereby broadening the horizon of the adults and enabling them to understand and effectively participate in the wider national life. For that it would be necessary to give re-orientation courses to the personnel engaged in these departments and to prepare literature to guide them in this work.

54. Within the broad framework of national priorities the actual programmes in a locality should be determined by local needs. Planning at the local level is equally essential if the danger of frittering away our meagre resources in a number of unco-ordinated activities is to be avoided. The principles which should govern our approach in this regard may be stated as follows. Our resources should be used in the first instance, as far as possible, for that programme which not only meets some immediately felt need of the local community, in whose midst the programme is conducted, but also builds up resources for developing the programme with the expanding awareness of the community of its own needs. That is the only way by which, with our limited resources, we can make any impression on the problem. Secondly, the social education approach must permeate all programmes of State aid to the people. That is to say that before any programme of State aid is launched the people should be so educated in regard to it that their instinct to help themselves is fully aroused and they are anxious to receive the programme and do their utmost in the execution of it. Thirdly, there should be the closest integration of the various activities conducted in a locality so that the forces of friendship and goodwill released by one activity, immediately recognised by the villagers as good or pleasant, can be utilised for winning their co-operation for activities requiring more strenuous effort or the usefulness of which is not so immediately apparent to them. Fourthly, it should be our endeavour to increase the effectiveness of private agencies doing social education work in an area by giving them proper help.

THE PROGRAMME

55. Besides the social education work which various agencies entrusted primarily with other work—like agriculture, animal husbandry, etc.—may carry on in close connection with their work, the programme of social education will fall into two parts. One should consist of whatever items any agency wants to or is capable of taking up out of the vast field of social education. Such agencies should be encouraged and helped, depending upon the usefulness of the work performed and the extent to which State resources can be diverted for the purpose. The other part should consist of a planned programme outlined below which should be undertaken wherever a properly trained worker is available. This is calculated to achieve maximum results. State resources should naturally be concentrated more on the latter part of the programme and in training workers for it. This programme will differ in rural and urban areas, in view of the different conditions prevailing in each.

56. In rural areas the point at which the social education programme in a locality can begin will of course depend on the conditions prevailing in the given area. Attempt should, however, be made at the earliest opportunity to organise an economic activity on co-operative basis. The precise nature of the activity and the degree and nature of co-operation will of course vary according to local needs and the degree of maturity of the local people. The underlying object is that not only will it provide education to the participants by organising community efforts and pooling their resources but it will also, by the more effective use of local resources, ensure economic gain, which will generate sustained interest and create confidence. The co-operative activity will be the rallying point for the community and mark the beginning of the community centre, the nucleus of which will be provided by the trained community organiser. Where a co-operative society already exists, the task of the worker will be to further improve it and transform it into an agency of social education. Similarly, programmes of health education and health services should also be organised on co-operative lines. The test of the proper time for any programme is that the community is psychologically prepared so that it can organise it with its own resources.

57. The importance of providing healthy recreation cannot be too strongly stressed. In organising recreational programmes special attention should be given to the revival and proper utilisation of our cultural agencies. Occasions provided by fairs and festivals should be utilised for purposes of education, recreation and community organisation. Literature should be prepared explaining the significance of the various fairs and festivals and their relevance today as well as how their full educational potentialities can be developed and made use of. The State should encourage writers to produce plays containing constructive ideas for such occasions. Film shows by mobile vans may also be provided to the extent that resources permit. It should be remembered, however, that unless integrated with the programme of development going on in an area their use is strictly limited. Certain films which will be relevant to conditions all over India, such as those dealing with common diseases and those calculated to inculcate right individual and collective habits, should be prepared by the Central Government and lent out to the various States. Well-regulated radio broadcasts should also be increasingly used for recreation and instruction.

58. In organising literacy and post-literacy work the aim should be to put it on a self-financing basis, as far as possible, by normally starting it only when the ground has been prepared by some more obviously useful activity like the economic activity, mentioned earlier, and the interest in knowledge has been sufficiently stimulated. A news-sheet, locally produced, and carrying suggestions for improving their lot—suggestions which they can immediately put into practice and in which they have developed faith as a result of the work in the first stage—should find ready customers among the villagers. At a later stage the State can help with libraries to the extent that its resources allow.

59. If we have provided the above four programmes, correlating relevant knowledge at every step, we will not only have met the primary needs of the masses but also taught them

through living, most of the things that are required for the citizen of a modern democratic State. There is, however, no end to activities that might be included in a programme of social education and, as the capacity of the masses to help themselves increases, more and more activities can be added. The above intensive programme should be spread in the surrounding villages through local leaders thrown up as a result of the working of small groups in youth clubs, women's clubs, children's clubs, farmers' clubs, etc., which it should be the aim of the community organiser to set up. Short and intensive camps should be organised for these leaders where the working of the social education programme is explained to them. Thereafter continual guidance is given to them from his headquarters by the community organiser.

60. In the case of urban areas, there are so many groups that the problems will have to be studied in relation to each group. The problem of healthy and cheap recreation is also more acute in the towns than in the villages. The overall considerations will, however, be the same as in the rural areas. The programmes must begin with felt needs and must have the capacity to grow by the resources of the local community. But in view of the congestion in towns, the high price of land and buildings and the business of the townsman, the State or philanthropic organisations may have to provide a building for each community centre, though even here the attempt should be to mobilise as much of the local effort as possible for the purpose. As in the villages so in the towns, the State or other organisations that may be doing the work of social education should provide a worker, highly trained in community organisation and in the mobilisation of its resources. In urban areas, especially in industrial areas, special attention should be paid to improving the skill of the workers.

SELECTION AND TRAINING OF WORKERS

61. The selection and training of workers are perhaps the most important tasks. Two types of social education workers will be required : those who have specialised in community organisation, and others who, with proper reorientation of outlook, can work under their guidance. In the case of the former especially, as the qualities of personality—initiative, resourcefulness, leadership, spirit of sacrifice and service and mastery of cheap, simple and intelligent living—are more important than mere academic qualifications, a new system of selection will have to be evolved. The training of community organisers should be very thorough and should consist of improved methods of Agriculture, Animal Husbandry, one or two of the most important cottage industries of the area concerned, principles and organisation of co-operatives, organisation of simple recreational programmes, organisation of community centres, etc., and, above all, the handling of these activities in such a way as to lead to the development of the minds of men most effectively. Training in literacy work should also be given. The training of community organisers should be arranged in conjunction with a training centre for basic teachers, a post-basic school or an agricultural school or college, which should preferably be at an extension headquarters. The greatest stress should be laid on the development of the maximum possible self-help and self-support, consistent with other interests, as these workers have primarily to infuse that spirit among the people.

62. The other category of social education workers will include school teachers, village level workers, various Government officers working in the locality concerned and workers of private agencies. Regarding pupil-teachers, training in social education work should be compulsory in all training colleges. The State should provide special grants for the departments of social education in training colleges for some years to come to give an impetus to the work. Short and intensive training in social education work should be organised in camps for teachers already on the job. The training of village level workers should also include initiation into the human side of their work : mass psychology, mass approach, community organisation, etc. Training facilities should also be offered for workers of private agencies. Higher officers should be given a reorientation course, so that they develop an integrated outlook, which will not only enable them to guide the worker with sympathy and understanding but also make for better inter-departmental co-operation, upon which the success of the rural development programme in an area depends.

RESEARCH IN LITERACY METHODS AND PRODUCTION OF LITERATURE

63. Teachers' training colleges should take up research in methods of imparting literacy. Work in the experimental centres of social education, which should be associated in the case of rural areas with the group of model basic institutions mentioned earlier, should provide sufficient material for literature suitable for adults. There is also considerable room here for inter-departmental co-operation and for co-operation between the States sharing a common linguistic area. The Centre should provide model guide books for workers and prepare pamphlets on certain standard subjects like health, democratic citizenship, co-operatives, etc.

DEVISING A SUITABLE MACHINERY

64. The present stage of social education in the country is essentially experimental and needs Central guidance. The work should be co-ordinated with similar work in basic education and a common committee of experts should advise the Centre in the matter of initiating and aiding financially experimental work in both these fields in the States, and guide it, assess the results and make them available to other States. A common national platform, where the various agencies can meet at intervals for mutual discussion—so necessary for evolving a common outlook and securing co-ordination of different agencies—is already provided by the Indian Adult Education Association.

65. The director of social education in a State should be a man highly trained in community organisation and should be able to advise and help the State in the matter of public participation in its various development programmes. He should have a body representing important non-official agencies to advise him.

66. At the field level it is mostly a task of re-organising and co-ordinating existing agencies rather than of creating new ones. The problem is different in rural and urban areas. In rural areas the following measures should be taken :—

- (1) Educational institutions should become examples of self-help, democratic community living, co-operative labour and intelligent handling of economic activity. Education should centre round agriculture and cottage industries

and educational institutions should be well equipped with agricultural farms, craft work-shops, etc. Educational institutions would thereby become excellent centres for spreading ideas for improving our social and economic life. Basic schools, which are already conceived on the above lines, have special significance in this regard. All facilities should, therefore, be provided at the basic training centres so that the teachers are trained as first class social education workers.

- (2) The village level worker, wherever provided, should also be stationed in a school, as far as possible. Under his guidance even an ordinary school may begin to make some contribution, which will also prepare it for ultimate conversion into a basic school.
- (3) Besides the above agencies the State should provide, wherever possible, community organisers, say one for 50 villages, to make use of, help, guide and co-ordinate the activities of all agencies working in their respective spheres. These also should be attached to educational institutions.
- (4) The role of private agencies has already been discussed.

67. In urban areas quite a large number of agencies exist and the key problem is to co-ordinate their activities for a comprehensive programme of social education. For this purpose city or town social education councils should be instituted, where they do not exist already, each consisting of the representatives of the various agencies operating in the town concerned. This Council should distribute items of social education work among the various agencies according to their capacity and willingness to undertake it. Social education in industrial areas in towns has special importance in view of the dull and drab conditions of life prevailing in urban areas. Here the employer and the labour unions should be able to co-operate.

7. PROFESSIONAL EDUCATION

68. The importance of professional education cannot be over-emphasised as it trains the personnel for the varied national tasks ahead as well as fits pupils for earning a living for themselves. In view of the under-developed state of the country, professions offering prospects of lucrative employment are limited. Even so, and despite the increasing attention which professional education has received in the last few years, the available facilities on the whole fall far short of the demand by students. Some of the important lines of professional education are dealt with below.

ENGINEERING AND TECHNOLOGICAL EDUCATION

69. *Assessment of the existing situation*—Engineering and technological education has been receiving an increasing amount of attention during the last five years. The development, however, has not been uniform at all levels. Facilities for post-graduate studies and research are very inadequate, while the progress in respect of the undergraduate

courses has been quite rapid. There has also been considerable expansion in the provision of facilities for diploma or certificate courses for training supervisory personnel. The following figures indicate the quantum of development since 1947 in the provision of degree and diploma courses :—

Year	Engineering		Technology	
	Output	Intake	Output	Intake
<i>Degree Courses</i>				
1947	950	2,520	320	420
1950	1,652	3,297	795	1,156
1951	2,152	3,755	675	1,338
<i>Diploma Courses</i>				
1947	1,150	3,150	290	500
1950	1,864	4,400	689	1,212
1951	1,923	4,965	885	1,523

Almost all the above development has taken place in the basic courses and specialised courses have not received due attention.

70. At the craftsman level, except in a few progressive States, adequate emphasis has not been placed on this highly important type of training and the existing facilities are very insufficient. Similarly the development that has taken place in the provision of facilities for the training of industrial workers, of technical teachers and instructors and of retrenched personnel for alternative employment is also not commensurate with the requirements of the country. Technical high schools, recommended by the Central Advisory Board of Education, have also not received sufficient attention.

71. It would thus appear that there has been extensive development in the provision of courses leading to degrees and diplomas. Until, therefore, the Technical Manpower Committee of the All-India Council for Technical Education has assessed the country's requirements, it would be advisable to consolidate the work in the existing institutions and not to embark upon new ventures, except in certain specialised fields mentioned later. This is all the more necessary in view of the fact that the recent large increase in numbers has not always been accompanied by corresponding expansion of physical facilities (buildings and equipment) and the training in at least some of the institutions leaves much to be desired. The improvement of institutions and reorientation of training are, therefore, the needs of the hour rather than any expansion in numbers.

72. Besides the quantitative aspect, mentioned above, are the more fundamental questions such as the pattern of technical education, the apportionment of responsibility as between the various agencies concerned, the control of technical education, co-operation between industry and commerce on the one hand and technical institutions on the other, etc., that will have to be dealt with.

73. *Pattern of technical education*—The Joint Committee of the All-India Council for Technical Education and the Inter-University Board has made specific recommendations in regard to the pattern of education at different levels, both in engineering and technology, viz. :—

- (a) that a Master's degree be given after a person has obtained the first award in the subject (the first University degree or its equivalent) and has gone through disciplined training, which may involve a certain amount of research ;
- (b) that the first degree in Engineering should be awarded on satisfactory completion of a four years' course, following Intermediate Science, of which at least six months should have been spent in practical training ; and
- (c) that the first degree in Technology should be awarded either after a four years' course following Intermediate Science or a two years' course following Bachelor's degree in Science.

74. Except for a few courses at the Indian Institute of Science, Bangalore, and the Indian Institute of Technology, Kharagpur, there are hardly any facilities at the post-graduate level in engineering. On the technological side, there are wide disparities both in the nomenclature of awards and in the content of training leading to post-graduate awards. Similarly at the under-graduate level, there are considerable variations in the duration and content of training. The lead given by the Joint Committee should be of great value in removing this chaos and we hope that the various universities will adopt the suggestions made by this expert body. We also hope that similar committees should be constituted to review from time to time the existing pattern in order to keep it adjusted to the changing requirements of the country and the institutions concerned will take advantage of the advice tendered by the appropriate expert bodies in the interest of efficiency and maintenance of standards.

75. One very important lacuna in the organisation of facilities for degree and diploma courses is the absence of adequate arrangements to enable young people entering industry to continue their education, concurrently with the discipline and experience of work, by part-time study during day time or in the evenings. Almost all development has taken place on routine lines and the time has come when due emphasis should be laid on practical aspects. We consider it important that appropriate steps should be taken to bring about the establishment of what are known in the United Kingdom as technical colleges, preferably by re-orienting the activities of some of the existing institutions. Such colleges will adopt a less academic approach to scientific principles than that characteristic of colleges preparing students for university degrees, and will train persons who will be of great use in the industrial advancement of the country.

76. For the training of engineering supervisory personnel, we would commend the universal adoption of the National Certificate Courses in engineering, framed by the All-India Council for Technical Education, which have the special advantage of being so devised that they can be taken on a part-time basis as well.

77. At the craftsman level there is at present no co-ordination in the matter of training and testing of craftsmen. The Government of India have recently appointed the National Trades Certification Investigation Committee. We hope that when its report is published it will provide valuable guidance in this matter.

78. Most of the trade training institutions cater at present for the urban population. We consider that the establishment of rural training centres, each at the centre of a group of villages, will go a long way towards improving techniques and skills of the villagers. These workshops should be opened in conjunction with basic institutions wherever possible, thereby effecting economy in equipment and staff and further establish the basic institutions in the affections of the people.

79. There is an urgent need for establishing a large number of technical high schools. We note that the All-India Council for Technical Education has appointed a small committee to report on this question.

80. *Apportionment of responsibility*—The responsibility for technical education has to be borne by the Central and State Governments on the one hand and industry and commerce on the other, with whatever assistance they can get from the public. So far as the State and Central Governments are concerned the Constitution has defined their spheres. Within that broad directive, we feel that the responsibility for technical education should be apportioned as follows :—

Research, advanced work and post-graduate courses.	Major responsibility should be that of the Central Government in view of the high expenditure involved and the need for proper co-ordination. The Central Government should, however, undertake this responsibility with such assistance as is available, from the State Governments, commerce and industry.
Under-graduate work	Major responsibility should be that of the State Government concerned, with such grants-in-aid as may be made by the Central Government for maintenance of proper standards and provision of new approved courses.
Diploma certificate courses for training supervisory personnel	The State Governments and the Central Government in the proportion agreed upon in each case.
Courses in junior technical institutions, industrial schools, trade schools, etc.	The State Governments with the assistance of industry.
Secondary education with technical bias	The State Governments.
Training of industrial workers or apprentices under proper supervision.	The Central and State Governments with the assistance of industry.
Training of technical teachers and instructors	The responsibility of the Central Government in this behalf will be in accordance with the responsibilities undertaken for the various levels of training for which teachers are being trained.

81. *Co-ordination of technical education*—At present, the position is that the All-India Council for Technical Education advises Governments on the development of higher technical education. This body's activities, however, relate only to the promotion of training and research facilities in the various institutions. For the promotion of engineering research, the Council of Scientific and Industrial Research has recently set up an Engineering Research Board. It is clear that the activities of this Board will extend to engineering colleges as well and we have no doubt that suitable means will be devised to co-ordinate the work of the two bodies.

82. The Council for Technical Education proposes to have four Regional Committees, one each for the eastern, western, northern and southern regions of the country. The eastern and western committees have already been set up and we hope that the other two will also come into being very soon. It is the function of these committees to advise the Central Government, the State Governments and other authorities on the various problems concerning the region, connected with the provision of educational and training facilities in technical institutions and industry and commerce at all levels.

83. In the interest of balanced development of technical education, especially in view of its expensiveness, it is desirable that the advice of a body which can take a comprehensive and overall view should be at the disposal of the various authorities running technical institutions or those who open new ones. We would recommend that a healthy convention should be established that whenever a new project is intended to be launched, or substantial development in existing institutions is contemplated, the views of the All-India Council for Technical Education are sought and accepted by the authorities concerned. This body with its Regional Committees, which would be in close touch with both technical institutions and industry and commerce, should be in an excellent position to render that service.

84. *Co-operation between industry and commerce and technical institutions*—The inevitable necessity of the closest co-operation between industry and commerce on the one hand and the institutions that train the personnel for them on the other is obvious, and every step should be taken to improve the position in this regard. Technical institutions and industry working together can develop courses at the post-graduate level in several ways. One of these is "company operated courses" for giving the new employees, in addition to works experience, some form of orientation training to acquaint them with their surroundings, the organisation of the companies, their purposes and policies and, above all, to show them the paths of opportunities that are open to them. The other is "college extension courses" for the technical employees of industry. Colleges located in industrial centres can meet a real need by offering out-of-hours courses for ambitious technical graduates. The third is "post-graduate college courses" for employees on leave. Indian industry can certainly accomplish the task of training top-grade scientists by returning to the universities and colleges a few men each year for independent study. Such men, returning to colleges in their mature years, should not undertake any specific courses of study, or work for any degrees, but should rather pursue their own research objectives, developed from their industrial experience,

doing some teaching also if they feel so inclined. Industry could greatly expand opportunities for advanced study in the colleges by providing fellowships for its own employees, who could be given leave of absence to carry on such study.

85. The importance of keeping the teaching staff alert brings up another field for co-operative programmes. Best results can be obtained by industry convening conferences of professors and teachers. A similar result can be accomplished in part through lectures at the colleges by industrial leaders. A series of lectures by a number of men in different fields will probably be more effective than single isolated ones. The stimulation obtained from dynamic leaders in particular fields should be a significant experience.

86. It does not appear that industry is making full use of technical institutions for the solution of its multifarious problems, both analytical and experimental. While such problems should be studied in colleges and technical institutions, it is essential that close association is maintained between industry and such institutions, with frequent interchange between industrial engineers and faculty members, in order to achieve the most effective results.

87. To bring about the various forms of co-operation it is necessary to bring together persons concerned with the provision of educational facilities on the one hand and industrialists and commercial magnates on the other. We consider it essential that the governing bodies of the various technical institutions should have adequate representation of industry on them and that the technical men working in industry should be given due representation on the standing advisory committees, constituted by the various institutions for the development of their departments. The presence of various interests in each region on the regional committees of the All-India Council for Technical Education should assist in bringing about greater co-operation between industry and educational institutions.

88. *Lines of development*—Organisation of facilities for professional education cannot be strictly related to the existing opportunities for employment but should take into account the developments planned in the various other spheres of national activity which require technical personnel. It is also necessary to turn out youngmen with initiative and grit in excess of the numbers indicated by the normal employment position in order that new ideas may be developed and small-scale ventures might receive an impetus. Data in regard to the employment position in different professions would still be an important requisite for the planning of facilities for professional education and it should be a point of major policy in the Plan to establish machinery for gauging the employment position accurately. Technical institutions can also help a great deal in the planning and organisation of facilities by maintaining proper records of their alumni and the work they do after leaving the institutions. Such records are useful in assessing the utility of the various courses provided in the institutions as well as for indicating the numbers for whom facilities are required to be organised.

89. Special attention should be given to the development of facilities for research and post-graduate work. To attract the right type of students it will be necessary to institute research scholarships of adequate value and in adequate numbers. Collaboration between universities and higher institutions on the one hand and the national laboratories and Central research institutions on the other would go a long way in promoting research. Integrated schemes to make full use of these institutions should be worked out. Existing institutions, having on their staff teachers of proved research ability, should also be encouraged by various means to develop their research sections in the particular fields.

90. The Central Government have established a higher technological institute at Kharagpur (the Indian Institute of Technology) and the All-India Council for Technical Education has recommended that this Institute should concentrate on post-graduate courses, advanced work and research. As many of the courses at the post-graduate level as possible should, therefore, be provided at this Institute. The Indian Institute of Science, Bangalore, should also be a good place, in our view, for the provision of such courses. Similarly other established institutions, which have attained high standards at the under-graduate level, should be assisted to develop post-graduate courses.

91. At the under-graduate level immediate steps have to be taken to provide courses in special subjects, such as technical training in printing, processing of woollen and silk fabrics etc. Expansion of facilities in architecture and town planning is also immediately necessary and the State of Bombay, which is comparatively advanced in the provision of facilities in these subjects should offer training facilities to other States. Reorientation of courses in some of the existing institutions and improvement generally of the institutions should also be undertaken. In the plans submitted by the State Governments it is observed that most of the schemes relate to Government institutions. While industry and private philanthropists may be expected to help in the improvement of non-governmental institutions, the State Governments should not exclude such institutions completely from their plans. We suggest that the State Governments should, in consultation with the All-India Council for Technical Education, review the question of the continuance of the ill-equipped institutions started recently and, should the decision be to continue them, provision should be made both in the Central and the State Governments' plans to bring about the desired improvement. To enable the State Governments to bear this increased burden the Central Government may undertake partial responsibility also for institutions hitherto financed wholly by the State Governments.

92. For the training of supervisory personnel special emphasis should be laid on the reorientation of the activities of some of the existing institutions so as to train students for the National Certificate Courses of the All-India Council for Technical Education, mostly on part-time basis.

93. The greatest need for expansion of training facilities is at the level of artisans and craftsmen. Institutions run by the Ministry of Labour, trade schools, industrial schools, production-cum-training centres should be opened on an extensive scale, so that the skills of the

large numbers of people, engaged in production or likely to be so engaged, are developed. The need for establishing rural training centres in villages has already been stressed. In towns, industry and technical institutions should co-operate to provide instruction for industrial employees. Training of varying standards will have to be organised for such persons.

94. Another important activity which should be organised on an extensive scale is the provision of apprenticeship training schemes in industry. Proper arrangements should be made for supervision of the training programmes in industry and for their co-ordination with instruction in technical institutions. The success of part-time courses depends mainly on the organisation of apprenticeship training schemes and properly co-ordinated programmes of this kind are likely to lead to increased production. We hope that the regional committees of the All-India Council for Technical Education will consider this task as of the greatest urgency and importance.

95. Only a few institutions have arrangements for refresher courses. Promotion of these courses, especially in areas where there is concentration of industries and other technical activities, should be encouraged. The regional committees of the All-India Council for Technical Education should investigate this problem in each region and organise, in collaboration with industrial and technical establishments on the one hand and educational institutions on the other, short-term refresher courses in various subjects, on a full-time or part-time basis, as may be convenient. As such courses will primarily benefit industry and other technical establishments, the financial liability should normally be borne by them though, with a view to giving encouragement, Government may share the responsibility to some extent in the initial stages.

96. The only institute for training of technical teachers is the one established by the Ministry of Labour at Koni Bilaspur. Here, instructors are trained for craftsmanship training. Knowledge of teaching methods is as important for a teacher in a technical institution as elsewhere. Some provision for the training of teachers has been made in the Ministry's plan as a beginning in this direction.

EDUCATION FOR COMMERCE AND MANAGEMENT

97. The needs of commerce are many. But though facilities exist, no comprehensive survey has been made of the state of commercial education in the country and the standards of the various courses provided. The need for such a survey can be easily appreciated.

98. There is considerable room for co-ordination and standardization in commercial education outside the universities. Different courses and examinations are held by various bodies which include the State Governments and commercial institutions and result in wide variation in standards which not only impede development of commercial education but lead to confusion in the employing agencies about the utility of these courses. The All-India Council for Technical Education and its board of technical studies in commerce and business administration have prepared national diploma and certificate courses for the training of

different categories of personnel required for commercial occupations. These courses, designed on a national basis and having in view the requirements of commerce and industry, go a long way towards achieving the much needed co-ordination and standardisation of training. A number of institutions are already affiliated to the All-India Council for these courses, and it is necessary now to have them accepted all over the country. We would suggest that the State Governments, who have their own institutions for commercial education or give grants-in-aid to similar private institutions, should introduce the national diploma and certificate courses. The All-India Council should periodically assess the standards followed by these institutions, in training and education.

99. A very important aspect of education for commerce which has attracted great attention of late, and has led to considerable development in the United Kingdom and the United States of America, is education in business management and industrial administration. The need for increasing production and raising the standard of living of the people by improving efficiency of manufacturing and distributing processes requires specially trained management personnel at all levels and in all fields. It is not enough to have only scientists and technologists, but also scientists and technologists, who can administer and organise large scale production and distribution. The majority of men, who possess technical qualifications, are entrusted with managerial functions at a comparatively late stage of their career. The need for training such men is obvious. The observations made by the University Education Commission, the Percy Committee of the United Kingdom and the Joint Anglo-American Council for Productivity, all bring out prominently the importance of management studies and the need for facilities for such studies. The remarks of the Percy Committee in particular are fully applicable to the conditions which obtain in India :—

“ The highly trained technician is often ignorant of the principles of industrial organisation and management and he often shows no inclination to accept administrative responsibility. Admittedly, there is much that can be learnt in this field only from experience, but there is a body of knowledge, the awareness of which may greatly facilitate the process of learning. This body of knowledge should be made available both at the under-graduate and the post-graduate stages.”

100. There is scope for organised education for management in this country and youngmen who reveal aptitude for managerial work can be better prepared by such education to take up responsible managerial positions in business. The task of detecting aptitude for managerial works and providing appropriate education and training to develop such aptitude into a profession can only be dealt with by such experts as now constitute the committee on industrial administration and business management, appointed by the All-India Council for Technical Education. This committee has already prepared a plan for introducing specialised full-time courses on industrial administration and business management for the eastern region, and is at present engaged in preparing a similar plan for the western region. It is important that the work of the committee is carried through with expedition and its plans and proposals for developing facilities for management studies, on a regional basis, are implemented.

LAW

101. Among the various professional courses law attracts, even now, perhaps the largest number of pupils in spite of the fact that conditions are by no means easy in that profession. This may be due to a desire to qualify for at least one profession however difficult the chances in it may be. Most of the lecturers in law colleges are part-time and the attention they give to their work leaves much to be desired. The University Education Commission has analysed the question of legal education in detail.

8. WOMEN'S EDUCATION

102. Everyone realises the significance of the problem of women's education in the special circumstances of our country today and the need for adopting special measures for solving it. The general purpose and objective of women's education cannot, of course, be different from the purpose and objective of men's education. There are, however, vital differences in the way in which this purpose has to be realised.

103. The main point of difference to be stressed is that there are particular spheres of life in which women have a distinctive role and in which they can make a special contribution. It is now universally recognised that in the management of the household, in bringing up children, in the field of social service, in nursing and midwifery, in teaching, especially in elementary schools, in certain crafts and industries like knitting, embroidery, etc., and in the field of fine arts, women have, by instinct, a better aptitude. This does not, however, mean that women should, whatever be their individual aptitudes and ambitions, be confined to these few spheres. They must have the same opportunities as men for taking to all kinds of work and this presupposes that they get equal educational facilities so that their entry into the professions and public services is in no way prejudiced.

104. In a programme of women's education the needs of different age-groups have always to be kept in view. These groups are : girls of the school-going age, *i.e.*, of the age-group 5-11 ; girls of the age-group 11-16 ; girls above this age who are married and have to look after their families ; and unmarried girls above this age who have to learn some vocation and earn their livelihood. There is also the problem of the social education of women in general.

105. The task of arousing the consciousness of parents to the need of educating their children, particularly their daughters, should form an integral part of a campaign of social education. Organisation of parents-teachers' associations would also go a long way towards the promotion and betterment of education in general and women's education in particular. Other organisations like the Bharat Sevak Samaj can undertake propaganda work in this connection.

106. Special facilities have to be provided for meeting the special needs of girls above the age of eleven who, owing to social and economic conditions, are not free to remain in schools even if they want to do so. Methods should be found whereby such girls are given special

facilities for prosecuting studies beyond the primary stage at home and are allowed to sit for the secondary school leaving certificate examination privately. This is one agency through which girls may be encouraged to pursue secondary education.

107. Another agency also may be thought of. There are many voluntary organisations which hold their own examinations and issue certificates and diplomas to those who are successful. Free scope should be given for such voluntary effort and Government may, wherever possible and necessary, recognise these diplomas and certificates and aid all approved voluntary organizations. We would like to emphasise the point that in the period of transition through which the country is passing in regard to education there should be the fullest scope for experimentation.

108. There are girl students who are unable, after the completion of the secondary course, to proceed to universities. All the same, they are interested in higher studies and can in their leisure moments pursue such studies and pass the normal university examinations. There are some universities which admit such private candidates for their examinations and we recommend this practice for adoption by others. Part-time schools and colleges, extension lectures, etc., are at present a common feature of educational organisations in most countries in the world and should also be organised in this country. The courses should be based on a harmonious combination of theory and practice.

109. The problem of women's education in India is above all the problem of the education of grown-up women. Generally, women cannot always be educated in the same continuous fashion as men. Unlike boys, girls are forced to suspend their studies in the early teens due to a variety of reasons and take up wider responsibilities of the home. Arrangements should, therefore, be made to facilitate resumption of studies by women at a time when they have leisure. While it is found necessary even in the most advanced countries of Europe and America to organise education for the middle-aged woman, it needs no argument to stress the importance of providing similar facilities in a country like ours. Social service organisations have to take up the cause of their education and conduct short-term courses for general education as well as for training in crafts.

110. As regards the content of women's education the point that has to be stressed is that, apart from the requirements of the different courses which they may take up, women should learn everything which will enable them to discharge those functions which, as has been observed in the introductory paragraphs, legitimately belong to their special sphere of life. The large majority of them will become mothers and have to bring up their children and manage their household in an economical and efficient manner.

111. There is also another aspect of the content of women's education for which special provision has to be made. It is one of the objectives of planning for women's education that at the secondary and even at the university stage it should have a vocational or occupational basis, as far as possible, so that those who complete such stage may be in a position, if

necessary, to immediately take up some vocation or the other. The idea of the bifurcation of secondary education is now widely accepted and what is stressed here is to give it extensive application, especially in the case of girls. Here, there should be co-ordination between planning for women's education and planning for cottage industries. Giving a vocational bias to women's education is also of additional value in so far as their energies will be directed to productive channels and should appreciably add to the national income of the country.

112. In the organisation of women's education the Girl Guide Movement has an important part to play. The movement at the present day is restricted to urban centres and even there its activities are not widespread. They do not reach all the girls in the locality but are restricted only to those who attend regular schools. What is needed is that the movement should bring into its fold all the girls in the urban areas and it should extend the scope of its operation into rural areas also. As an agency of social education it is potentially strong and the planning for women's education must make the fullest use of it.

113. There are also the beginnings of women's welfare movement in the country. In this connection, the step taken by the Madras Government in constituting a separate women's welfare department, administering a comprehensive programme, both in rural and urban areas, with the help of trained social workers and a large number of voluntary workers, is significant. The results achieved by the department are worthy of emulation by other State Governments. The Government of Uttar Pradesh, it is understood, has already followed suit. The Ministry of Rehabilitation at the Centre and some of the departments of rehabilitation at the State level have also set up special divisions to deal with the problems of displaced women. The fullest use should be made of these departments for spreading education among women.

9. OTHER PROBLEMS

Labour and social service by students

114. Institution of compulsory social and labour service for students is being urged, both as a measure of educational reform and as a means of improving the quality of manpower. The idea briefly is that students of both sexes, between the ages of 18 and 22, except when exempted on medical grounds, should be called upon to devote a period of about a year to disciplined national service at such place and time, and in such manner, as the State may decide. The economic value of the product of such labour is not the chief consideration although the endeavour should be to increase constantly the efficiency of the work done so that it can become a source of real satisfaction, create a pride of achievement, and at the same time, make the scheme as nearly self-sufficient as possible. The primary aim of the period of training is, however, the building up of students as workers and disciplined citizens. The vast place which manual work occupies in the life of a nation should be reflected in the activities of every citizen and the dignity of manual labour should be realised in practice. These lessons are best inculcated in the formative years of one's life as a student. A certain amount of manual work, as a part of the daily routine, and a short-term stay in a labour camp once a year, should be features of the curriculum throughout the educational period. At some stage during this period, for a considerable length of time, manual activity should figure as the major item in the day's routine of the student. This, it is believed, should not be less than six months but may extend to a year.

115. This service can take a variety of forms. It will develop significance in proportion to its relation to the real needs of the community. Community projects, irrigation works, buildings of public utility, roads, slum improvement, sanitation, etc., are among the avenues which are immediately open. Association of students with such works will bring them an intellectual and emotional awareness of the various tasks of national reconstruction, which are in progress.

116. The intention is that every student before he enters life goes through the period of training. For those who enter the universities, the end of the intermediate course would be the most suitable stage for participation in the scheme. It will cover a fairly large group and will operate at a time when the pressure of economic considerations is not as great as at later stages. In the absence, however, of sufficient experience of handling large bodies of students with economy and efficiency, the cost of introducing this scheme at this stage would be prohibitive. It is desirable, therefore, to begin with a small manageable group, for a period of three to six months ; and as experience is gained and more funds become available, to shift the incidence of the scheme to an earlier stage and extend the period of its operation.

117. Doubts have been raised regarding the desirability of introducing compulsion in this matter. They relate only to short-term difficulties and do not seriously touch any question of principle. A period of preparation and experimentation will be needed before the service can be put on a compulsory footing. Meanwhile, the scheme should be introduced on a voluntary basis with certain inducements. Those who go through such a course will naturally be more fitted for positions of responsibility. Organisers of this scheme should be as far as possible college professors for whose training adequate arrangements should be made. In this task, help should be sought of organisations like the Hindustan Scouts and Guides, Hindustani Talimi Sangh, colleges of physical education, the Bharat Sevak Samaj and other social service organisations. A provision of rupees one crore has been made in the Plan for implementing the scheme.

Teachers' salaries and conditions of service

118. One of the chief causes of the poor standards in the educational institutions is the low scales of salaries paid to teachers and the highly unsatisfactory conditions of their service. The Central Government have taken steps to improve them in the centrally administered areas and recently some States have also taken similar steps but on the whole conditions remain very unsatisfactory. We are convinced that no improvement in the existing system will be possible without improving the conditions of service of teachers and putting their remuneration on a fair basis of comparison with other services. We strongly recommend that every State Government should examine the position of teachers' salaries and, within the limits of their resources, endeavour to raise the scales of pay.

119. In view, however, of the large numbers involved and the strained resources of the State, the relief that might be expected from this measure is not likely to be sufficient, and it will have to be otherwise supplemented. Whenever possible, additional facilities in the form of free accommodation, fee concessions for their children's education, etc., should be provided. In village schools attempt should be made to provide every teacher with a plot of land where he and his family can grow their own vegetables. While all measures should be taken to prevent the evil of private tuitions, avenues of useful educational work should be provided by which teachers can supplement their income and at the same time help the cause of educational improvement and expansion in their leisure hours. They could, for instance, be given the chance of participating in activities like conducting refresher courses of teachers of lower classes during vacation, organising extension services in universities, running evening classes for working children, undertaking social education work, etc., and paid extra allowance for the same. Besides adding to their income, participation in these activities should, in many cases, help to enrich the personality of the teacher concerned and improve his knowledge.

Physical and mental health

120. Proper provision should be made in educational institutions for maintaining the physical and mental health of students. Health education should form a compulsory part of the curriculum from the earliest stage to the end of the university career. Educational institutions should also be responsible for spreading health education in the community around. Norms of physical fitness—comprehending agility, strength and endurance—should be laid down for boys and girls at every stage of education. These norms should be worked out by experts and applied to different groups of people, with due regard to variations in economic, climatic and other conditions. The course of the physical exercises calculated to help students to attain these norms should, however, be regulated by medical advice in each case. The attainment of these norms should be certified by a diploma which should be given some consideration in matters of public appointments and the like.

121. We would also recommend to the State Governments and other authorities the following measures in this connection :

- (1) A National College of Physical Education for training the higher personnel for physical education and community recreation and leadership should be set up. The existing Central Institution for Physical Education in Bombay may be upgraded for the purpose.
- (2) Suitable courses of physical education should be prepared and introduced in schools and colleges. These should provide for games and sports as well as suitable Yogic exercises.
- (3) Adequate facilities for training of physical instructors should be provided. In ^{existing} teachers' training institutions physical education should be an essential subject. Short-term courses in physical education should also be organised for teachers.
- (4) Research in physical education should be conducted, especially in regard to the following problems :
 - (i) the relative value of different sports, games and exercises from the physiological, social and educational points of view ;

- (ii) the value of the Yogic system of exercises ; and
 (iii) appropriate suitable syllabuses of physical education for different age and vocational groups.

122. As regards mental health, the need for emotional stability should be recognised and the stabilising, ennobling and unifying influence of religion should be utilised for the purpose. In the earlier stages the moral truths common to all religions should be taught and emphasis laid on their practice. The University Education Commission has already made recommendations* in regard to the study of religion at the university stage.

10. EDUCATIONAL PROGRAMMES

Scope

123. The total allotment for educational development proposed in the Plan is Rs. 151·66† crores for the five-year period or an average annual expenditure of Rs. 30·33 crores. The total expenditure on education in 1950-51 was Rs. 63·16 crores of which Rs. 19·55 crores may be regarded as development expenditure. The increase from Rs. 19·55 to Rs. 30·33 crores a year represents an increase of nearly 55 per cent.

124. The expenditure provided under the head " Education " does not include the sum of Rs. 55·28 crores, during the five-year period or Rs. 11·06 crores annually on an average, proposed to be spent on a number of schemes of training, education and research, which are shown under other heads such as Agriculture, Medical, Industries, Labour, etc. The expenditure on such schemes in 1950-51 was Rs. 6·96 crores only. The Plan thus represents an increase of 58·9 per cent. The sums included directly under education (*i.e.*, Rs. 151·66 crores) are nearly 46 per cent of the total proposed expenditure on Social Services, which is Rs. 339·81 crores. The expenditure on education is nearly 7 per cent of the total expenditure of approximately Rs. 2,069 crores visualised in the Plan.

Distribution of expenditure

125. The distribution of the total expenditure visualised over the five years of the Plan among the various sub-heads will be as follows, according to the schemes submitted by the Central Ministry and the States :—

State/Ministry	(Rs. in lakhs)							
	Adminis- tration	Primary Education	Second- ary Education	Univer- sity Education	Techni- cal and Vocational Education	Social Education	Other schemes	Total
States	75·7	74,52·8	8,30·4	9,25·1	9,90·4	7,60·0	5,84·1	1,16,18·5‡
Central Government . . . . .	...	12,50·0†	‡	2,47·0	11,55·0	7,50·0†	1,00·0	35,02·0
TOTAL (1951-56)	75·7 (0·5%)	87,02·8 (57·6%)	8,30·4 (5·5%)	11,72·1 (7·8%)	21,45·4 (14·2%)	15,10·0 (10·0%)	6,84·1 (4·5%)	1,51,20·5§
Development expenditure in 1950-51	9·5 0·5%	13,24·2 (67·7%)	88·9 (4·5%)	1,20·1 (6·2%)	2,65·6 (13·6%)	76·9 (3·9%)	71·1 (3·6%)	19,55·3 (11·1%) will be

* Ref. pp. 300-302, paras. 31-34 of the University Education Commission Report.

† This sum does not include the additional resources that the local bodies may be able to raise for the purpose.

§ Figures do not include Rs. 46 lakhs, earmarked for Jammu & Kashmir State, as break-up of this amount into sub-heads is not available.

‡ Some expenditure is visualised on Secondary Education, promotion of Federal and Indian languages, etc., out of Rs 20 crores shown here under basic and social Education. Detailed break-up is not yet available.

The development programmes introduce no radical alterations in the overall structure of the educational system. The tendency in the pre-Plan period to broaden the base of the system has, as a matter of fact, been retarded. The percentage of development expenditure on primary education has fallen from 67·7 per cent in 1950-51 to 57·6 per cent during the period of the Plan. The need of the present situation, however, is as stated earlier, that the present emphasis on primary education should be considerably increased. Although it is not possible to introduce radical alterations in the pattern of expenditure in the short period of five years without serious dislocation, the programme should be revised, wherever possible, so as to lay much greater stress on primary education than has been done hitherto. Similarly the emphasis on technical and vocational education needs an upward revision.

Programmes of the Ministry of Education

126. The total expenditure proposed for the Central Ministry is, as stated above, Rs. 35·02 crores. Out of this provision, a sum of Rs. 5·72 crores* was provided in the budgets of 1951-52 and 1952-53. The provision for the remaining three years of the Plan would, therefore, be Rs. 29·30 crores at the average rate of Rs. 9·77 crores. The development expenditure of the Ministry in 1950-51 was Rs. 1·25 crores.

127. The provision of Rs. 35·02 crores is roughly divided into Rs. 20·00 crores for pre-university education, comprising mostly of basic and social education; Rs. 2·92 crores for university education; Rs. 11·10 crores for scientific and technical education; and Rs. 1 crore for youth camps and labour service for students. A large number of the schemes contemplated are intended to be carried out in the States which are willing to co-operate and jointly share financial responsibility with the Centre in such proportions as may be agreed upon. The various types of schemes contemplated are shown below :

(a) For pre-university education the Centre has the following schemes :—

(1) *Basic and primary education*—Complete units of basic education, from the pre-basic school to the post-graduate basic training college, will be set up, at least one in each State. Research in the problem of methods and curricula, with a view to improve them will be one of the special functions of these units and results achieved by them will be made available to all basic institutions of the country in a systematic manner. The training colleges of these units will train teachers for junior and senior basic schools. Each of these units will also be a community centre as well as a research centre where the impact of a complete unit of basic education on the whole life of the community will be studied. Ordinary primary schools in the area in which a basic unit is set up will also be helped to improve their standards.

(2) *Social education*—Janata Colleges will be established, at least one in each State, for experimental purposes. Their main object will be to train social education workers, community organisers and administrators. When some of these colleges are no longer needed for this training they will be turned into rural colleges. These colleges will also serve as

* The revised estimates for 1951-52 were Rs. 1·49 crores and the budget estimates for 1952-53 were Rs. 4·23 crores.

community centres. An attempt will also be made to establish at least one school-cum-community centre in each district. The Janata Colleges will be opened in association with the units of basic education mentioned above. Library service will also be integrated with these institutions. The aim of concentrating all these institutions in one area is to attempt the intensive educational development of that area.

(3) *Secondary education*—At least one multi-lateral high school will be opened as a pilot institution in each State, if necessary with suitable Central aid. These schools will have not only sections for liberal arts and sciences but also sections for technical education, commerce, agriculture, etc. Occupational schools, particularly for children between the ages of 14-18 will also be established, where possible, for experimental purposes. Grants will be given on a non-recurring basis to such experimental schools conducted by the States if they satisfy the necessary conditions. Research bureaus devoted to the study of problems of secondary education will be established at secondary training colleges or universities. Merit scholarships will be provided in existing public schools to enable able but poor students to obtain the benefits of these institutions.

(4) *Audio-visual aids*—Production of these will be encouraged by establishing a unit at the Central Institute of Education which will co-ordinate the efforts of research workers and teachers in this field all over the country. The State Governments, private firms and publishers will be assisted in producing simpler audio-visual aids. These aids will be for use in primary and secondary schools as well as in social education work.

(5) *Experiments*—Grants will be given to State Governments and to voluntary and private organisations for carrying out important educational experiments.

(6) *Training*—Grants will be given to State Governments for the training of basic teachers and social education workers. There are schemes for training the personnel for organising selective tests and providing vocational guidance.

(7) *Literature*—The Central Ministry of Education will produce selected model literature and encourage various firms and publishers to produce reading material. The literature which will be produced will be for children, for social education, for basic education as well as for secondary schools. Competitive prizes and awards will be given to encourage the production of this literature and audio-visual aids.

(8) *Indian and federal languages*—Original works as well as translations in various Indian languages will be assisted. Steps will be taken to promote the federal language. In the first instance, dictionaries, encyclopaedias and other reference books will be produced by the Central Ministry.

(9) *Juvenile offenders*—Pilot centres will be established for the treatment of juvenile delinquents and defectives.

(b) For technical education a provision of Rs. 11.10 crores has been made. Out of this amount a sum of Rs. 7.55 crores will be spent on schemes which are already in progress. They include schemes for the development of the Indian Institute of Technology, Kharagpur, and the Indian Institute of Science, Bangalore. Both these schemes are calculated to make up for the deficiency of facilities for post-graduate and research work in this country. The scheme for the development and expansion of 14 engineering institutions is expected to give tone primarily to under-graduate work where there has been expansion in recent years without proper provision of teachers, equipment, buildings, etc. The practical training stipends scheme is calculated to help to make up the deficiency of practical training among the products of technical institutions in our country. Out of the balance of Rs. 3.55 crores, money will be found for further helping post-graduate courses and advanced research work ; for providing facilities for the study of special subjects like technical training in printing, processing of woollen and silk fabrics, etc., at the under-graduate level; for training in architecture and town planning ; for developing facilities for part-time courses at the various levels; for providing for teachers' training ; and finally for construction of hostels.

(c) A sum of Rs. 2.92 crores has been provided for helping universities in the study of science and humanities. Out of this another sum of Rs. 20 lakhs has been earmarked for helping libraries in universities and Rs. 45 lakhs for the research training scholarship scheme.

(d) The establishment of a National Central Library at New Delhi is also under consideration.

Programmes of the State Governments

128. The expenditure proposed in the States' sector is Rs. 116.65 crores, or an average annual expenditure of Rs. 23.33 crores, which represents an increase of 27 per cent over the development expenditure of Rs. 18.31 crores in 1950-51. The scope of the expenditure in the States' sector is increased by the fact, already stated, that the major share of the expenditure of the Ministry of Education is to be incurred in the various States.

129. The types of schemes which State Governments have submitted under different heads are as follows :—

(1) Schemes of primary education include improvement of existing primary schools and opening of new ones, conversion of primary into basic schools and opening of new basic schools. Under improvement of existing primary schools are schemes for the improvement of buildings, the provision of play-grounds, the improvement of salaries of teachers, and the training of additional teachers. There are programmes for the training of basic teachers, whether newly recruited or taken from existing schools for refresher courses. Buildings and equipment for basic schools to be opened have also been provided for. There are schemes for extending primary education to rural and other backward areas.

(2) Schemes for secondary education include those for opening of new secondary schools and improvement of existing ones. There are schemes for opening both middle and high schools. Improvement schemes consist of provision for buildings, equipment and staff, as well as for upgrading of primary to middle schools, middle to high schools and high schools to intermediate colleges. New subjects like physical education, military training, gardening and agriculture, music, etc., are sought to be introduced in some schools and

there are schemes for training of teachers in some of these subjects. There are schemes for maintenance of model schools. Some States have special schemes for extending secondary education for girls. A number of States have sought to provide playgrounds for secondary schools. In States where new areas have been merged, special provision has been made for extending education to those areas.

(3) Schemes for university education include opening of new universities and colleges, and improvement and expansion of existing colleges. Improvement schemes consist mostly of improvement of buildings and equipment. Expansion schemes involve opening of new classes of higher standard for new, mostly scientific, subjects. Provision for scholarships to meritorious students and for research has also been made.

(4) Schemes of social education include schemes for libraries, physical education and youth activities, audio-visual education, literacy and adult education centres, social education among women, etc. There are no schemes for the training of social education workers, organisers and administrators. The Central Government, however, have plans for providing these training facilities in co-operation with State Governments.

(5) Schemes of technical and vocational education include those for encouraging technical and vocational education at all levels. At lower levels there are schemes for opening craft schools, converting craft schools into junior technical high schools, for survey and opening of junior polytechnics, for organising technical and vocational education in middle schools, for conversion of secondary schools into technical high schools, for organisation of diploma courses, for opening industrial schools and agriculture bias schools, etc. Hitherto craft centres have been opened only in towns. In the working of the Plan care should be taken to provide rural training centres [reference para. 78] as well.

At higher levels we have the upgrading of some commercial and technical schools into colleges, opening of new technical colleges, grants to existing technical institutions, giving stipends to students for studies abroad, etc.

(6) *Administration, direction and inspection*—The expansion of educational activities would necessitate the strengthening of the headquarters staff as well as the inspectorate staff. The introduction and extension of basic education and technical and vocational education has made the addition of special staff necessary. Various schemes have been provided for improvement of administration, direction and inspection.

(7) Besides the schemes mentioned above, there are schemes for further education of ex-Service personnel, for development of regional languages and literature, for the education of the handicapped, for setting up the National Cadet Corps in colleges, for the improvement of special fields of education as oriental education, statistics, etc. There are schemes for the training of personnel abroad.

Results of the programmes

130. The results of the above programmes as estimated on the basis of State resources proposed to be spent are shown in the statement on pages 568 and 569 and are summed up below :

(1) In the field of primary education the number of primary schools will increase by 17 per cent and the number of pupils by 25 per cent. The corresponding increase in the junior basic

schools would be 22 per cent and 81 per cent. Taking the primary and junior basic schools together, we find that whereas in 1950-51 only 44·5 per cent of the children of the age group 6-11 were being provided for, the percentage is estimated to rise to 55·7 per cent in 1955-56. This result is estimated only on the basis of State resources. We feel that it can be considerably improved if local resources are properly developed and tapped for the purpose of education. Though firm estimates are impossible at this stage it should not be difficult to reach the target of 60 per cent. Again if crafts are introduced in primary and middle stages and the training in them is properly handled it should be possible to add the three senior classes to primary (or junior basic) schools without any appreciable addition to the cost, which should enable us to improve considerably the results in respect of the children of 11-14, and which should favourably affect the estimated results in regard to secondary education mentioned below. Besides those who go to regular schools a large number of properly directed children's clubs run with voluntary help, especially of students, should be able to spread, as already stated, some of the essentials of education among a large number of children who cannot go to school or for whom schools are not provided.

(2) In the field of secondary education while secondary schools are estimated to increase by 18 per cent during the period of the Plan the number of pupils would increase by 32 per cent. The percentage of the age-group 11-17 being provided for will increase from 10·8 per cent in 1950-51 to 13·3 per cent in 1955-56.

(3) In the case of technical and vocational education (other than industrial schools), although the percentage increase (57 per cent in the case of institutions and 63 per cent in the case of number trained during the year) is very striking, it has to be viewed against the present poor provision. The case with industrial schools is similar.

(4) As regards teachers, training facilities expand differently at different levels. While the number trained during the year increases only by 15 per cent in the case of primary teachers, it increases by 54 per cent in the case of secondary schools and 162 per cent in the case of basic teachers. The low percentage increase in the case of primary teachers is explained by the fact that with the policy of ultimately converting all primary schools into basic schools most of the States are taking steps to convert their primary teachers' training colleges into basic training colleges. It may be said that a high percentage of development of training facilities at all levels is contemplated during the Plan period. But the existing facilities are so insufficient that this increase does not make much impression on the present situation where a very high percentage of teachers are untrained. The percentage of untrained teachers in 1950-51 was 37 in the case of primary schools, 45 in the case of junior basic schools and 44 per cent in the case of secondary schools. As a result of expansion of training facilities the percentage of trained teachers will rise by 3, 15, 6 per cent, respectively in the cases of primary, junior basic and secondary teachers.

(5) The highly unsatisfactory situation in regard to girls' education does not improve appreciably and the programmes need to be revised to lay sufficient emphasis on this very important aspect of the educational problem.

PROGRESS OF

(According to programmes)

Year	No. of institutions	Primary (ordinary)				Junior Basic					
		Pupils		Teachers		Pupils		Teachers			
		Total No.	Percentage of girls	Total number	Percentage of trained teachers	No. of institutions	Total number	Percentage of girls	Total number	Percentage of trained teachers	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
1950-51	.	1,72,779	1,51,10,316	30	3,86,169	63	35,002	29,00,322	8	77,013	55.0
1955-56	.	2,02,141	1,87,88,750	32	4,60,324	66	42,833	52,76,278	13	1,11,893	70.3
Percentage of increase in 1955-56 over 1950-51.		17	25	2	19.2	3	22	81	5	45	15

NOTE : Figures for Hyderabad, Kashmir, Rajasthan, Ajmer and Vindhya Pradesh are not included, unless otherwise specifically stated. Other States excluded under various heads are mentioned below :—

(1) Figures for Uttar Pradesh are not included.

(2) Figures for Uttar Pradesh are not included.

(3) Figures for Madhya Pradesh, Uttar Pradesh and Mysore are not included.

(4) Figures for Madhya Pradesh, Uttar Pradesh and West Bengal are not included.

(5) Figures for Madhya Pradesh, Uttar Pradesh and West Bengal are not included.

(6) Figures for Madhya Pradesh, Travancore-Cochin and Coorg are not included and those for Rajasthan are included.

(7) Figures for Madhya Pradesh and Coorg are not included.

(8) Figures for Madhya Pradesh, Madras, Madhya Bharat, Mysore, Saurashtra, Travancore-Cochin, Bhopal, Coorg, Himachal Pradesh, Kutch and Tripura are not included.

(9) Figures for Madhya Pradesh and Coorg are not included.

(10) Figures for Madhya Pradesh and Coorg are not included.

EDUCATION, 1951-56.

submitted by State Governments)

No. of institutions	Secondary Pupils		Teachers		Technical and Voca- tional (excl. Indus- trial Schools)		Industrial Schools		Training of Teachers (number trained during the year)		
	Total number	Percentage of girls	Total number	Percentage of trained teachers	No. of institu- tions	Number trained during the year	No. of institutions	No. trained during the year	No. of Primary trained	Number of Secon- dary trained	Number of Basic trained
(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
16,387	43,87,657	19	1,63,575	56	260	26,702	365	14,750	27,927	9,516	5,370
19,262	57,79,395	16	2,06,856	62	407	43,603	456	21,797	32,212	14,666	14,045
18	32	—3	26	6	57	63	25	48	15	54	162

(11) Figures for Rajasthan are included.

(12) Figures for Madhya Pradesh, Mysore and Manipur are not included.

(13) Figures for Madhya Pradesh are not included.

(14) Figures for Madhya Pradesh are not included.

(15) Figures for Orissa, Pepsu, Himachal Pradesh, Coorg, Manipur and Tripura are not included. Figures for Hyderabad are included.

(16) Figures for Orissa, Pepsu, Coorg, Manipur and Tripura are not included. Those for Hyderabad are included.

(17) Figures for Bihar, Saurashtra and Part 'C' States are not included. Those for Rajasthan and Hyderabad are included.

(18) Figures for Bihar, Saurashtra and Part 'C' States are not included. Those for Hyderabad are included.

(19) Figures for Travancore-Cochin, Bilaspur, Coorg and Tripura are not included.

(20) Figures for Coorg, Delhi, Kutch and Tripura are not included.

(21) Figures for Uttar Pradesh, Travancore-Cochin, Coorg, Kutch, Manipur and Tripura are not included.

CHAPTER XXXIV

LABOUR

OUR APPROACH to labour problems rests on considerations which are related on the one hand to the requirements of the well being of the working class and on the other to its vital contribution to the economic stability and progress of the country. The worker is the principal instrument in the fulfilment of the targets of the Plan and in the achievement of economic progress, generally. His co-operation will be an essential factor in creating an economic organisation in the country which will best subserve the needs of social justice. Certain rights and obligations are associated with this distinctive role.

2. Adequate provision has to be made for the basic needs of the workers in respect of food, clothing and shelter so as to enable them to remain in a state of health and efficiency. Besides the satisfaction of these basic needs, they should have their due share in social and economic progress in the shape of improved health services, wider provision of social security, better educational opportunities and increased recreational and cultural facilities. The workers must, of course, as members of the community have the full benefit of the social services and facilities available to any other section. Appropriate measures must, however, be taken to meet their peculiar difficulties and to remove their special handicaps.

3. The conditions of work should be such as to safeguard the worker's health and protect him against occupational hazards. The work-place should provide reasonable amenities for his essential needs. The worker should also be equipped with the necessary technical training and a certain level of general education. Having placed his assets—labour and skill at the disposal of the community, he should be assured of a reasonable measure of security against the various natural and other risks to which he is exposed. In his relations with the management, it is necessary that he should be treated with consideration. When he feels he cannot get a fair deal from his employer, he should have access to an impartial machinery set up for the purpose. The worker must be free to organize and to take lawful action in furtherance of his rights and interests. The community has recognised most of these rights, which have found a place in the Constitution.

4. The Central and State Governments have been alive to all these needs of workers. Some of the laws pertaining to factories, trade unions, workers' compensation for injuries and death have been in existence for a long time, but the pace of action has quickened since Independence. The Ministry of Labour at the Centre, in particular, have made strenuous efforts to promote the well-being of the working class on the basis of a planned programme with legislative and administrative measures, much of which has been successfully carried out. In the sphere of labour legislation undertaken recently mention may be made of the Industrial Disputes Act, 1947, the Factories Act, the Coal Mines Provident Fund and Bonus Scheme Act, the Minimum Wages Act, the Employees' State Insurance Act of 1948, the Plantation Labour

Act, 1951, the Mines Act and the Provident Fund Act of 1952. Some of these Acts have already come into operation while others are being put in force. A number of welfare schemes particularly for employees of mines and of Central Government undertakings have been introduced by the Ministry. Housing for industrial workers has made a modest beginning. Effect is now being given to the recommendations of the Commission for participation by Government in this activity on a much larger scale. In addition to the funds allotted to housing and to resettlement schemes of landless agricultural workers over 6.74 crores of rupees* are intended to be spent on labour welfare during the period of the Plan, both by the Central and State Governments. Tripartite bodies have been set up to advise Government on various labour matters. Advisory Boards are working in many States. The employment position in factories has been much better during recent years as compared to the two years immediately after the end of the war. The average annual earnings of factory workers have shown a steady increase. Trade unionism has experienced a remarkable growth during these years but the qualitative progress has not been even.

5. The response of the workers to these measures has been satisfactory. Noticeable increases in production have been recorded in a number of industries during last year and the first half of this year. Strike activity has considerably diminished. The number of man-days lost last year was the lowest among the years of the post-war period. There is increasing evidence of the relations of mutual dependence and the need for direct dealings on the part of the representatives of the workers and the employers. The emergence of the Joint Consultative Board as a bi-partite structure on the initiative of the top representatives of the working class and industry is a welcome advance. The tendency to rely more and more on internal settlement was manifest during and strengthened by the proceedings of the Indian Labour Conference held recently.

6. Greater improvement in the economic condition of workers has, however, been impeded by a rising price level and failure of the industry to renovate and modernise plant and rationalize management in many cases. In this context it is, however, to be realized that rate of progress has to be determined not only by the needs of the workers but also by the limitations of the country's resources. Too rapid changes or changes on a wide scale may result in financial, administrative and other difficulties which endanger new reforms and retard further development. On the side of labour, there should be a keen realisation of the fact that in an undeveloped economy, it cannot build for itself and the community a better life except on the firm foundations of a higher level of productivity to which it has itself to make a substantial contribution. The role of labour in promoting better standards of living for the community involves acceptance of greater regularity in attendance, disciplined behaviour and meticulous care in discharge of duties. To ensure this, much greater attention has to be paid to the spread of literacy and the healthy development of trade unions so that workers are not exposed to exploitation and can act with greater sense of responsibility.

* This includes in the case of some States the normal administrative expenditure for implementing labour legislation.

7. Industrial relations, wages and social security, working conditions, employment and training and productivity are among the important aspects of the labour problem in respect of which the Commission proposes to make specific recommendations.

I. INDUSTRIAL RELATIONS

It is proposed to deal here with industrial relations both in the private and public sector. The role the trade unions and employers' organisations have to play in the implementation of the plan also requires to be specifically stated. The recommendations in this section have, therefore, been grouped under the following heads : (A) Private sector, (B) Public sector, (C) Role of trade unions and employers' organisations in a planned economy.

A. PRIVATE SECTOR

8. Harmonious relations between capital and labour are essential for the realization of the targets of the Plan in the industrial sector. This would be assured to a large extent if it were possible for management and labour to come to an agreement regarding the principles which should govern industrial relations. To this end the Planning Commission worked out certain proposals in consultation with the Ministries of Labour and Commerce and Industry on the basis of which agreed conclusions have been reached in the Industries Development Committee composed of representative employers and leaders of the principal workers' organisations in the country. These agreed conclusions are reproduced below :—

The approach

9. Peace in industry has a great significance as a force for world peace if we consider the wider implications of the question. The answer to class-antagonisms and world conflicts will arrive soon if we succeed in discovering a sound basis for human relations in industry. Economic progress is also bound up with industrial peace. Industrial relations are, therefore, not a matter between employers and employees alone, but a vital concern of the community which may be expressed in measures for the protection of its larger interests.

10. In a community organised for social justice and the good of all its members, there would be a constant reconciliation of the interests of all sections and no legitimate occasion for a group to interfere with production or disorganise the life of the community should arise. Even where the workers and employers are ranged in opposite camps, the essential oneness of their interests over a wide area of the mutual relation of the parties is evident. But there is doubtless also a very considerable ground over which conflicts may arise. The employer usually possesses superior strength which may become a source of injustice and oppression unless he is imbued with a high sense of fairness and uses his advantage with scrupulous regard to the rights and interests of others. In an economy organised on the basis of competition, private monopoly or private profit, the workers' right to have recourse to peaceful direct action for the defence of their rights and the improvement of their conditions cannot be denied and should not be curtailed unduly. It is generally accepted, however, that in any emergency and in the case of services, essential to the safety and well-being of the community recourse to a

strike or lock-out may be suspended or withheld on the condition that in all such cases provision is made for a just settlement of the parties' claims. Experience of many years has demonstrated that in the majority of labour struggles, owing to the ignorance and the mistakes of the workers and their organizational and bargaining weakness they have failed to gain their ends irrespective of the merits of the disputes. The community has, therefore, to intervene for redressing the balance in favour of the weaker party to assure just treatment for all concerned. Legal provisions relating to trade unions and industrial disputes have to be framed and interpreted in relation to these objectives. On occasions the workers too make an unreasonable use of their strength. Whatever may be the apparent outcome of a labour conflict, the resulting loss far outweighs any advantage secured by a party and in most cases all concerned stand to lose.

11. In normal times and in ordinary cases whether the right to strike or lock-out should be circumscribed is an open question. An economy organised for planned production and distribution, aiming at the realisation of social justice and the welfare of the masses can function effectively only in an atmosphere of industrial peace. India is moving in this direction. It is also at present passing through a period of economic and political emergency. Taking the period of the next few years, the regulation of industrial relations in the country has to be based on these two considerations and it is incumbent on the State to arm itself with legal powers to refer disputes for settlement by arbitration or adjudication, on failure of efforts to reach an agreement by other means. However, the endeavour of the State has all along to be to encourage mutual settlement, collective bargaining and voluntary arbitration to the utmost extent, and thereby to reduce to the minimum occasions for its intervention in industrial disputes and the exercise of the special powers. The restrictive aspects of any existing or future labour legislation must be judged in the light of these considerations.

12. The employer-employee relationship has to be conceived of as a partnership in a constructive endeavour to promote the satisfaction of the economic needs of the community in the best possible manner. The dignity of labour and the vital role of the worker in such a partnership must be recognised. In dealing with the worker it has not only to be borne in mind that his energy and skill are the most precious assets of the nation, but also that his personality is an object of care and respect and of equal significance and worth with that of any other element in the community. It may be that the worker on account of handicaps of illiteracy and ignorance and lack of opportunities is not able to play as effective a role in the working of industry as he should. Industrial relations have to be so developed that the worker's fitness to understand and carry out his responsibility grows and he is equipped to take an increasing share in the working of industry. There should be the closest collaboration through consultative committees at all levels between employers and employees for the purpose of increasing production, improving quality, reducing costs and eliminating waste.

13. The worker's right of association, organisation and collective bargaining is to be accepted without reservation as the fundamental basis of the mutual relationship. The attitude to trade unions should not be just a matter of toleration. They should be welcomed and helped to function as part and parcel of the industrial system,

14. If any differences arise between the parties, they should be examined and settled in a spirit of reasonable adjustment with an eye to the good of industry and the well being of the community. In the last resort differences may be resolved by impartial investigation and arbitration. The intervention of the State and imposed settlements may become necessary at times. The stress of the administration as well as the efforts of parties should, however, be for avoidance of disputes and securing their internal settlement.

15. The machinery and procedure relating to compulsory arbitration and adjudication of disputes should be so designed as to secure the essence of a fair settlement based on the principles of natural and social justice with the minimum expenditure of time and money. To achieve the aforesaid aims, statutory provisions in this connection should be framed in accordance with the following principles :

- (i) Legal technicalities and formalities of procedure should be reduced to the minimum, the relevant facts and figures should be furnished quickly and attention should be focussed on the material points in issue.
- (ii) The machinery and procedure should be adapted to the varying needs. Every dispute should be taken up for final disposal directly at a level suited to the nature and importance of the case. Relatively simple or less important matters should not entail a disproportionate expenditure of time and attention.
- (iii) Selection, recruitment and training of the personnel of the courts or tribunals should be carried out with a view to securing competent disposal of the question coming up before them and the requisite technical help should be provided to obtain speedy settlement and to avoid miscarriage of justice.
- (iv) There should be no appeal from decisions of an industrial court or tribunal, barring the very exceptional case of a decision which may be found to be perverse or against the principles of natural justice.
- (v) The provisions of law should be adequate for securing strict and prompt compliance with the terms of any award or decision.

16. Industrial arbitration differs fundamentally from the ordinary administration of justice. In the latter case the law of the land has pre-determined the rights and obligations of the parties and the courts have only to interpret and apply the provisions of the statutes. A wide element of discretion, however, rules the decisions of industrial tribunals, because there are no established criteria for settling the issues which arise before them. It is possible that case law on those points will grow in course of time, but in matters affecting large economic interests it would be a very unsatisfactory procedure to leave the 'norms' and the guiding policy to be settled by such a process of trial and error. The ^{scrupulous} ~~adoption of~~ Industrial Truce adopted at the Industries Conference in December 1947 visualises the establishment of a machinery for the determination of 'norms' and standards which may govern the mutual relations and dealings between the employers and employees and the settlement of industrial disputes. The most suitable machinery for the purpose can only be a tripartite body consisting

of representatives of employers, employees and Government. It may be expected that agreements will be reached on many contentious matters, but where this is not possible the Government may, with such expert assistance and judicial advice as is needed, itself arrive at decisions. These agreements or decisions may, according to the nature of the case, be issued as directives binding on the courts or the tribunals, or embodied in legislation.

17. There is need for continuous education of employers and employees as well as the public with regard their to duties and mutual obligations. The conduct of the parties must be in keeping with the objectives of the Constitution and the declared social policies of the State. Enlightened and active public opinion capable of mobilising itself on the side of justice and fairplay should be counted upon as a much more potent force for the maintenance of healthy industrial relations than the coercive powers of the State.

18. It should be realised that while the economic aspects are important we are basically dealing with a human, psychological and social problem. The key to industrial peace lies ultimately in a transformed outlook on both the sides and it should be the business of leadership in the ranks of labour and employers as well as in Government to strive to [workout a new relationship among the parties in accord with the spirit of true democracy. Where the State is itself the employer the relations between the management and the employees should be so ordered as to offer an example of sustained mutual goodwill and fruitful collaboration.

Avoidance of disputes

19. In order to avoid needless friction, and disputes between employers and workers, it is necessary to lay down in concrete and specific terms the duties and responsibilities of either side. A worker should know what is expected of him in the particular occupation or capacity in which he is employed. He should also know the privileges which are due to him, in relation to the performance of his duties. The standing orders, which are now obligatory in case of most industrial establishments, cover some of this ground, but there are other matters concerning the relations between the parties and the precise range of duties of operatives in which some guidance may usefully be provided. Each undertaking should, therefore, adopt a manual of instructions for different classes of operatives of the type in vogue in some Government offices and commercial establishments. Such manuals should be prepared, and when necessary revised, by tripartite consultation.

20. Elected representatives of workers function as shop-stewards in some establishments at present. This agency should be developed and fully employed for redressal of grievances of workers in their individual and collective capacity.

21. An employer should in consultation with the workers lay down clearly the manner in which any worker or group of workers, individually or collectively through their representatives, may approach authorities at different levels in the plan in respect of various types of grievances. Such procedure should be as uniform as possible for different workers in the same industry at the same centre. Suitable records may be maintained for this purpose wherever necessary. It should be open to an individual worker or his representative in due course to approach the highest executive on the spot, in the last resort. By suitable means the workers should be

kept in touch with the state of the industry and the affairs of the establishment in which they are employed. This applies particularly in matters which concern them directly. The workers should be apprised in advance, in all feasible cases, of any contemplated change which may alter the *status quo* relating to their conditions and interests. The employees must similarly indicate their desire for any change in the existing conditions. The observance of such a procedure will prevent precipitate action which often leads to avoidable trouble. Direct action on either side in violation of this obligation should be punishable under the law.

22. The standing orders should embrace all matters of routine industrial administration and any differences between the parties regarding the terms of the standing orders should be resolved by arbitration. Model standing orders should be framed officially for the purposes of guidance and to operate till they are settled in accordance with the prescribed procedure. Arrangements should be made for registration of agreements at whatever stage they are concluded between the parties, with the explicit provision that any dispute regarding the interpretation of the terms of the agreement will be referred to arbitration.

23. Social contacts, not of a patronising character but as among members of an industrial family, should be promoted for all those associated with the working of the establishment at any level. The supervisory staff and the technicians have a special position of advantage for taking the initiative in establishing a spirit of brotherhood and cordial relations. The personnel officers on the staff, usually designated as labour or labour welfare officers, have a special responsibility for the avoidance of disputes and creating mutual goodwill and understanding. In a number of cases owing to wrong selection, lack of proper equipment or training and a wholly misconceived view of their role on the part of the employer, these officers have failed to render very useful service and have, on the other hand, accentuated distrust and ill-will between the parties. Remedial action in this matter in which the State may assist should be undertaken by organisations of employers without delay. It will be found helpful if joint committees at various levels periodically review the developments in industry and working conditions and other matters of common interest.

Internal settlement

24. The informal approach visualised so far may not succeed in disposing of all the differences which arise between the employer and the employees in an establishment. Questions also arise which affect the common interests of the workers engaged in an industry and which must properly be pursued on a collective basis. Efforts for the settlement of such disputes may be pursued in a co-ordinated manner either through a suitable machinery for joint deliberations or by collective bargaining between the representatives of organised labour and of the employer or a group of employers as the case may be.

Joint committees

25. Works committees for the settlement of differences on the spot between the workers and the management is the key of the system of industrial relations as conceived in this Plan. Joint committees should also be set up for a centre and for the industry as a whole to tackle questions of wider import. These committees will be the best vehicle for improving labour relations and promoting employer-employee collaboration in

the interests of high production and greater well-being of the workers through the progress of industry. It will not suffice to provide for the creation of joint committees either on a voluntary or compulsory basis. When a new institution of such a high significance has to be developed, active steps must be taken to foster it and to create conditions conducive to its healthy growth.

26. The successful functioning of works committees rests a good deal on the initiative, sympathy and interest of the management. The supervisory staff should be encouraged to lend a helping hand. There should be periodic review of progress of works committees. The circumstances hampering the operation of a committee in any unit should be examined carefully and every effort should be made to remove the hindrances. The works committee is in no sense to be a rival of the trade union. Every effort should be made to secure the support and co-operation of the latter in the conduct of the works committees. The personnel of the works committees on the side of the workers should invariably be chosen by the trade union enjoying a representative character and having the backing of the majority of the workers in a unit. In all other cases the workers should themselves elect their representatives on the works committees. It should be open to a union official or a Government Labour Officer to assist in the proceedings of the committees at the invitation of either party.

27. The committees while being free to take up any matter coming within the range of industrial relations should, in order that they may grow in strength, have a list of specified functions. All questions relating to amenities, working conditions, matters of discipline, quality of materials etc., should be necessarily dealt with by these committees. A works committee cannot of course take any decision which may diverge from the terms of a collective agreement and its decisions regarding matters lying within the scope of collective agreement should be subject to the ratification of the management and the organisation of labour possessing the bargaining rights for the purpose.

28. A works committee is ordinarily the culminating step in the grievances machinery designed to function within a unit and there may be a separate committee for the purpose of collaboration in dealing with matters specially relating to production. It may, in certain cases, be found more convenient to entrust the works committee with the functions of a production committee.

Collective bargaining

29. Collective bargaining can derive reality only from the organised strength of the workers and a genuine desire on the part of the employer to co-operate with their representatives in exploring every possibility of reaching a settlement. A legal framework may, however, be created to determine the appropriate bargaining agency and to fix the responsibility for the enforcement of collective agreements. For the success of collective bargaining, it is essential that there should be a single bargaining agent over as large an area of industry as possible and uniform conditions should be secured in at least all the establishments in one centre. Where no trade union has built up the requisite strength to obtain a representative character, the largest union should have the right to function in respect of all establishments in which it has a majority of the workers as its members. Separate unions for industrial

establishments in the same industry in a local area are inimical to the growth of a strong and healthy trade union and their existence may be justified only in very exceptional circumstances. Provision has to be made for the direct election of representatives of workers from among the employees when no trade union exists or is able to secure the right to represent them. While it is preferable to have a single industrial union covering all the occupations in an industry, latitude may be permitted for special categories of salaried employees to form their own unions if the majority of these employees are in favour of such a course. In the absence of all other agencies arrangement has to be made by the State for the appointment of officials to look after the interests of the workers in industrial disputes.

30. To the bargaining status of the parties would naturally be attached certain obligations, especially with regard to non-participation in illegal strikes and illegal lock-outs.

31. An elaborate procedure relating to the representation of employees and employers may not be easily applicable to small and less advanced industries and a simpler alternative should be available for such cases.

Conciliation and enquiry

32. The State has to step in with an offer of conciliation when the parties fail to reach an agreement and the dispute continues. Conciliation should be made available in all such disputes and must be resorted to except when there is a voluntary submission for arbitration or a direct approach to a tribunal or court is permitted or prescribed. The conciliation officer has an important role for which he should be adequately equipped and trained. For cases involving major issues *ad hoc* or standing conciliation boards may be appointed. The board should be composed of an independent chairman and persons in equal numbers to represent the interests of the parties. Panels of non-official conciliators may also be formed. Conciliation proceedings should be carried on in a completely informal atmosphere and concluded as quickly as possible within a fixed time limit. A court or a tribunal should not take cognizance of what transpires in conciliation proceedings.

33. It may be useful in certain cases to have recourse to an official enquiry for the purpose of avoiding disputes, eliciting information or educating public opinion regarding the merits of a dispute. A court or a commission of enquiry may be set up for this purpose.

Arbitration

34. Adequate machinery should be provided for arriving at impartial decisions regarding disputes which are found incapable of settlement by conciliation. It is necessary to empower labour courts to take cognisance and dispose of any complaints relating to working conditions, health, safety, welfare and kindred matters. Reference of disputes relating to such crucial questions as wages, hours, rationalisation schemes should, as far as possible, be left to be settled by conciliation or voluntary arbitration. The State may, however, have to refer such disputes for compulsory arbitration in the absence of a voluntary submission. Employers and trade unions may be encouraged to bind themselves in advance to submit to arbitration every industrial dispute in which a settlement is not reached by conciliation and not to sanction or resort to a

strike or lock-out as the case may be which is not legal and in respect of which all the legal methods for the settlement of an industrial dispute have not been exhausted. Such employers and unions should be in a position to make a direct approach to the machinery set up by statute for the purpose of compulsory arbitration. The most honourable and patriotic course for employers and employees would be to agree to submit any present or future dispute or classes of such disputes to arbitration of any person or board of their choice. The number of such agreements would be a good index of real progress in industrial relations in the country. The apparatus of arbitration must be adjusted to suit a variety of needs. For important industries separate wage boards would be found very helpful. Such wage boards may also be established at the centre to which issues affecting an industry in the country as a whole may be referred. A central tribunal should be set up to deal with disputes of national importance.

35. The cause of industrial peace has not been helped by the manner in which the legal machinery has functioned in several industrial disputes. There is a widespread feeling that excessive delays occur and the judgments in several cases lack balance and are incapable of meeting the true requirements of the situation. The remedial action already outlined here would go far to set things right. A considerable factor in the length of proceedings will be eliminated if the party making a claim submits its complete case at the start, furnishing a copy to the opposite party simultaneously. Similarly when conciliation fails a statement signed by the parties offering to submit their differences to arbitration may straightaway operate as a submission, to obviate delay.

36. The work of the industrial and labour courts suffers in quality and speed of disposal because the necessary information is not readily available. In part the State can itself fill the gap by preparing in advance the factual and statistical material which, in the light of experience, is found to have a bearing on the various types of cases which come before the courts. The State should have the power to require any employer or employers generally to maintain and furnish data relating to plant, manufacture, industrial transactions and dealings which might be needed for the settlement of industrial disputes. The balance sheets of industrial concerns have often to be cited. They should be supplied to the authorities in a suitable standardised form as soon as they are ready. Provision for this may be made in the Companies' Act in which there should also be adequate safeguards to ensure that the balance sheets present the correct state of affairs of the company.

37. Legal sanctions may have to be employed for securing due observance of the awards and decisions of the tribunals. If direction and control of an establishment becomes necessary for this purpose they may be exercised under special legislation to be undertaken for the regulation of industries

Stoppages

38. There is obvious justification for compulsory postponement of stoppages without notice of change and while collective bargaining, conciliation or arbitration is in progress. A strike or lock-out without due notice during the pendency of any proceedings or in violation of the terms of a settlement, agreement, award or order have of course to be banned and attended by suitable penalties and loss of privileges. An illegal change should be treated on the same footing.

B. PUBLIC SECTOR (INDUSTRIAL AND COMMERCIAL EMPLOYEES IN PUBLIC UNDERTAKINGS)

39. In India, as elsewhere, more and more industrial undertakings are now being financed and managed by the State. The number of workers employed in such undertakings is sufficiently large and harmonious industrial relations therein are matters of vital importance to the success and efficient working of these undertakings.

40. Public undertakings differ in an important respect from private undertakings. The 'profit' motive and the exploitation of workers for private gain have no significance in the State-owned enterprises. The undertakings have no doubt to show the same, if not greater efficiency of working as private-owned undertakings. They have also to show profits. But the nature of these profits is different. The profits which these undertakings make are not profits intended for any individual or group of individuals but are extra wealth for the whole country.

41. A worker in a public undertaking stands on a different footing from a worker in private undertakings. He has a dual role of master and servant ; master as a citizen of the country and servant as a worker of the undertaking. It is therefore necessary that he should be made conscious that in serving the undertaking he is serving himself and that the better he works and the greater his efficiency the better he will serve and help himself. He must be made to feel that the responsibility for the success or failure is as much his as that of the management and that the undertaking belongs to the country as a whole including himself. He should take pride in his contribution to the success of the undertaking.

42. The workers' enthusiasm for the success of public undertakings can be aroused only when they know that justice and fairplay prevail in the undertakings and proper arrangements are made for redress of the grievances of the workers. The aim should be to have a co-operative and contented labour force. The ways by which this can be achieved while maintaining peace in the undertakings and increasing production are :

(a) Wages in public undertakings should not be less favourable than those prevailing in the neighbouring private enterprises. In so far as working conditions and welfare amenities are concerned, undertakings in the public sector should set the pace and serve as models.

(b) The Board of Directors of these undertakings should have on it a few persons who can understand labour problems, the labour point of view and who have sympathy with the aspirations of labour.

(c) The benefits of all labour laws which are applicable to similar private undertakings should also be made available to the workers of these undertakings. Exemption from such labour legislation should as a rule not be granted but in case where the existing benefits are as good as or more favourable than those provided by such legislation, grant of exemptions may be considered.

(d) There should be progressive participation of labour in many matters of the undertaking. Works committees for the different departments and for the undertaking as a whole should be set up. The committees should be used for consultation and suggestions. The atmosphere should be such that the workers should be made to feel that in practice, as well as in theory, they are partners in the undertaking.

(e) Effective consideration of staff interests demand organized representation. A labour movement devoted to the protection and advancement of employee needs is as indispensable in public as in private undertakings. It is therefore essential to encourage the growth of healthy trade unions in these undertakings. There should not be any restrictions on industrial and commercial employees of Government undertakings exercising their trade union rights like any other employees.

(f) Collective bargaining between workers and management should be encouraged. Such collective bargaining should embrace both economic and non-economic demands. The management on the spot should be given full discretion and power to enter into commitments within certain prescribed financial limits. Government conciliation and arbitration machinery should be made available to the workers of these undertakings. The existing right of Government to accept, reject or modify an award should be restricted to periods of emergency.

(g) It is desirable that agreements between the management and the representatives of workers should make provisions for measures for increasing output and reducing cost, combating absenteeism and checking offences against discipline.

C. ROLE OF TRADE UNIONS AND EMPLOYERS' ASSOCIATIONS A PLANNED ECONOMY

43. The trade unions and the employers' associations can play a positive and important role in the execution of plans as experience of other countries has shown. For the successful implementation of the plans in India, co-operation from trade unions and employers is absolutely essential. The important central organizations of workers and the employers' associations should be persuaded to treat the period of the execution of the Plan as a period of national emergency. Their close co-operation should be secured at different stages of the execution of the Plan. Some beginning has been made in the direction of such co-operation. The passing of the Industrial Truce Resolution in December 1947, whereby both the employers and workers agreed to refrain from the use of lock-outs, strikes and slow-down tactics, the establishment in 1948 of industrial committees for important industries on a tripartite basis, the setting up of works committees under the Industrial Disputes Act, the co-opting of labour representatives on the Development Committee where labour matters are discussed, the constitution of the Joint Consultative Board on a bipartite basis and the recent establishment of the Central Industries Advisory Council on which employers and workers are represented along with other interests, are some of the instances of such co-operation. All these are steps in the right direction. The scope of such co-operation should be widened and the representatives of employers and trade unions should be associated at every step in the implementation of the Plan.

44. Co-operation from unions and employers can assume several forms, some of which have been mentioned below :—

The All-India Organizations of Workers and of Employers can play an effective part by undertaking the task of presenting the plans to the affiliated unions and employers and discussing them with their members. They should convey their views to the planning authority and

to Government. The aim should be to create enthusiasm amongst workers and employers for the Plan. The unions and the employers could thus contribute much to the achievement and overstepping of the targets of the Plan. Healthy emulation should be promoted among the workers for this purpose.

The need for maintaining peace in industry and for avoiding interruption of work during the period of implementation of the Plan is obvious. In the interest of national economy unions and employers should exercise the utmost restraint in this respect.

The outlook of unions with regard to the question of wages should be attuned to the requirements of economic development, in keeping with considerations of social justice. It may otherwise happen that the increases are won by workers in those industries in which they are highly organised, while those which have a weak or no organisation would be neglected. It would not be appropriate to ask for flat percentage increases to maintain the relative advantage of those placed in higher categories.

The trade unions have to assume increased responsibility for the success of the productive effort. The whole economic health of the country depends upon rapidly increasing the productivity of labour. Such increases will largely depend on improved conditions of work and improved method and machinery. It will also greatly depend upon the utmost participation by the mass of workers in speeding up and improving production and that improvement can best be effected through modern industrial trade union organisations. All this would depend upon the extent to which employers associate workers with the productive effort and make the workers feel that in increased production lies the good both of the employers and workers. The employers should consult workers in respect of new machinery, methods of production and the way in which economies could be effected in the costs of production.

An important welfare activity to which the trade unions in foreign countries have devoted themselves to is the organisation of co-operative societies. The activities of most of the trade unions in India have been confined so far to getting the grievances of workers redressed and fighting for the rights of the workers. This might have been inevitable in the earlier stages of the development of trade unions in this country. Trade unions should now devote more time to welfare and cultural activities especially the organisation and running of consumers' and credit societies. This will be an important activity for the benefit of the workers. The employers could help such activity by providing facilities such as, accommodation, clerical help, loans to start such societies etc.

Trade unions and employers' representatives should be associated at the various levels—at the level of the undertaking, at the level of industry and at the regional and national level. The workers should feel that they are playing an effective part in the implementation of the Plan and that on them depends the rise in their standard of living as well as that of the common man.

II. WAGES AND SOCIAL SECURITY

45. The worker today is not satisfied with merely the wage he receives. He expects to be protected against various types of natural and other risks arising out of employment. In addition to the principles of wage policy it is proposed to deal here with social security and provision for the future of workers. This section has, therefore, been sub-divided into: (A) Wages and (B) Social security.

A. WAGES

46. During the war and the post war period there had been a rapid rise in prices. The profit of industries have considerably increased. The organised section of labour has also been able to obtain substantial increases in wages. But if the inflationary pressure is to be checked, steps may be necessary to divert to saving the present expenditure on consumption and to increase production. With regard to the industrial sector, profits and wages may have to be subjected to some control by Government during the period of the implementation of the Plan. Action should therefore be taken on the following lines :—

(a) The excess profits tax and certain restrictions on dividends during the war and for a short period after the war have helped to keep in check the distribution of large dividends. During the period of the implementation of the Plan also similar restrictions should be placed on the remuneration of management, distribution of profits and the issue of bonus shares. Such restrictions may have to give due consideration to :

- (i) a fair return on capital depending upon the nature of the business and the past practice of paying dividends during normal periods ;
- (ii) the claim of share-holders for a fair return on capital where during the initial period of the new undertaking no distributable profits are made.

(b) On the side of wages, any upward movement, at this juncture, will further jeopardise the economic stability of the country if it is reflected in costs of production and consequently raises the price of the product. For workers too, such gains will prove illusory because in all likelihood they will soon be cancelled by a rise in the general price level, and in the long run the volume of employment may be adversely affected. Such an increase in wages should, therefore, be avoided. Workers can be expected to agree to such a course only if restrictions are also placed on the distribution of profits as outlined in (a) above. Any steps to restrict wage increases should, therefore, be preceded by similar restrictions on the distribution of profits. Subject to this wage increases should be granted under the following circumstances :—

- (i) To remove anomalies or where the existing rates are abnormally low ;
- (ii) To restore the pre-war real wage, as a first step towards the living wage, through increased productivity resulting from rationalisation and the renewal or modernisation of plant.

47. Certain broad principles which may help in the regulation of wages have emerged as a result of the labours of various Commissions and Committees appointed by the Central and State Governments. These have, for the most part, been embodied in the existing and

proposed legislation on the subject. They still do not form an adequate practical basis for a uniform policy in determining wage rates and effecting wage adjustments. The tripartite machinery, visualised in the section on Industrial Relations, should evolve in as precise terms as practicable, the ' norms ' and standards, which should guide wage boards or tribunals in settling questions relating to wages, having regard to the claims of the various groups of workers *inter se*, of the other participants in industry and of the community as a whole. The course of action in this respect in the immediate future should be governed by the following considerations :—

(a) All wage adjustments should conform to the broad principles of social policy and disparities of income have to be reduced to the utmost extent. The worker must obtain his due share in the national income.

(b) The claims of labour should be dealt with liberally in proportion to the distance which the wages of different categories of workers have to cover before attaining the living wage standard.

(c) The process of standardization of wages should be accelerated and extended to as large a field as possible. There should be a progressive narrowing down of disparities in the rates of remuneration of different classes of workers in the same unit, of workers engaged in similar occupations in different units of the same industry, of comparable occupations in different industries and in wages in the same industry at different centres. Differentials for various jobs should be maintained at the minimum levels justified by :

- (i) the degree of skill required ;
- (ii) the strain and the fatigue involved ;
- (iii) the training and experience required ;
- (iv) the responsibility to be undertaken ;
- (v) the mental and physical requirements for doing the work ;
- (vi) the disagreeableness of the task ; and
- (vii) the attendant hazards.

(d) A scientific assessment of the relative work-load in different occupations and industries should be taken up. In this connection pilot studies on payment by results which are proposed to be sponsored by the Ministry of Labour with the technical assistance from the I.L.O. are a step in the right direction.

(e) The payment of dearness allowance to compensate for the rise in the cost of living has been an important feature of the wage structure during the war and post-war period. Since the end of the war there have been demands made on behalf of labour for merging a substantial portion of dearness allowance into basic wages as there was no likelihood of prices falling to the pre-war level. The Government of India recently appointed a Committee to recommend what percentage of dearness allowance given to Central Government servants should be treated as pay. The Committee, in its report submitted to Government, has come to the conclusion that in the foreseeable future the cost of living index is not likely to fall below the range 265-284, taking the pre-war index to be 100. On this basis, the Committee recommends that 50

per cent of the dearness allowance admissible to the Central Government servants drawing a basic pay upto Rs. 750 p.m. should be amalgamated with pay. We accept this recommendation and suggest that the recommendation made by the Committee should be extended to workers in the private sector also.

48. Full and effective implementation of the minimum wage legislation should be secured during this period. Depressed areas should receive prior attention. In view of the paucity of data and the administrative difficulties pointed out by various State Governments, a limited beginning should be made with regard to the fixation of minimum wages for agricultural workers and the scope should be extended further as experience is gained. Suggestions on this subject have been made earlier in the report.

49. A kind of profit sharing in the form of periodic bonuses usually awarded by industrial courts and tribunals exists today. No proper basis for the awards has been worked out. The subject is one requiring expert examination and a study of the general and technical aspects of the problem. Efforts should be made to find out suitable experts within the country as also from countries like the U.S.A., Germany, the United Kingdom, Sweden, and organisations like the I.L.O. who should go into the question of wages, profits, terms and conditions of payment, etc., and make recommendations. Although the quantum of bonus to be paid would be determined by the formulae to be laid down, to prevent the diversion of resources into consumption payment in cash should be restricted, the balance to constitute the savings of workers. This course of action should be accepted on the basis that it does not prejudice the contentions of either party regarding the character of the bonus. This would of course have to accompany similar restrictions on consumption in respect of other sections of the community.

50. Permanent wage boards with a tripartite composition should be set up in each State and at the Centre to deal comprehensively with all aspects of the question of wages, to initiate necessary enquiries, collect data, review the situation from time to time and take decisions regarding wage adjustments *suo motu* or on reference from parties or from the Government.

B. SOCIAL SECURITY

51. Article 32 of the Constitution says, "The State shall, within the limits of its economic capacity and development, make effective provision for securing the right to work, to education, and public assistance in case of unemployment, old age, sickness, disablement and other cases of undeserved want." While this is generally applicable to the population of the country as a whole, the industrial worker is more liable to disease and invalidity than the average citizen. The man-days lost on account of sickness and disability constitute a heavy drain not only on the slender resources of the industrial workers but also on the industrial output of the country. Lack of social security impedes increased production, leads to larger labour turn-over and prevents building up of a stable and efficient labour force.

52. In all advanced countries the worker is protected against various types of risks such as, sickness, unemployment, old age, employment injury, maternity, invalidity, etc. In India also, some of the risks to which a worker is exposed have been covered by the Workmens' Compensation Act and the Maternity Benefit Acts of the various State Governments. The Employees

State Insurance Act is a more comprehensive piece of legislation and it applies in the first instance to factories using power and employing 20 or more persons, and covers all employees who are in receipt of remuneration not exceeding Rs. 400 p.m. It insures risks of sickness, maternity, and employment injury. In addition to the medical care to which an insured person is entitled, cash payments are given equal to about half of the average wages.

53. The scheme framed under the Employees' State Insurance Act has been introduced at present in Delhi and Kanpur and is expected to be implemented throughout the country by the middle of July 1954. The programme for the implementation of the scheme in other States prepared by the Labour Ministry should be adhered to and the State Governments, employers and workers should offer their fullest co-operation for the purpose. The scheme does not include at present the families of the insured persons. Both in its coverage and the amount of benefits provided the scheme may appear to be modest as compared with similar schemes in some of the advanced countries. In view of its novelty, administrative and other difficulties and the financial implications of the scheme, efforts should be directed during the period of the Plan only to the proper implementation of the scheme in its present form and to putting it on a sound and sure foundation.

54. Another measure which can provide for the future of the workers is the institution of provident funds. The Central Legislature has recently passed the Employees' Provident Fund Act, 1952. A scheme under that Act has also been published and its implementation is expected to take place shortly.

55. The Act at present applies to six major industries employing 50 or more persons—Textiles, Iron and Steel, Cement, Engineering, Paper and Cigarettes. As soon as experience is gained and the scheme is placed on a sound basis, it should be extended in gradual stages to all the industries employing 50 or more persons during the period of the Plan. A programme for its extension should be drawn up.

III. WORKING CONDITIONS

56. In order to get the best out of a worker in the matter of production, working conditions require to be improved to a large extent. The Factories Act, 1948, the Indian Mines Act, the Plantation Labour Act, 1951, and the proposed Central legislation for regulating the conditions of work in shops, establishments and motor transport services, have this common object and are sufficient for the purpose. The emphasis in the next five-years should, therefore, be on the administrative measures needed for the implementation of such legislation. So far as the workers employed in factories and plantations are concerned, action may be taken on the following lines :—

A. FACTORIES

57. The Factories Act, 1948, is a comprehensive measure, and should, to a great extent, help to improve working conditions inside factories. This will be possible only if the provisions in the Act are properly enforced. The Act contains detailed provisions for ensuring the

safety, health and welfare of workers employed in factories. The provisions relating to medical supervision and occupational health, which had not hitherto received proper attention, have been strengthened, and notification of occupational disease has been made compulsory in order to focus attention on these aspects of the problem. Apart from these, the various provisions relating to welfare should contribute to the general well-being and contentment of the workers. The effective implementation of the Act is, therefore, a matter of the utmost importance in efforts to improve working conditions and promote the general well-being of the worker, and for this purpose the following recommendations are made :—

(i) Satisfactory standards have not yet been achieved in respect of enforcement in many areas. Factory inspection services need to be strengthened for this purpose and should be so reorganised as to include not only persons representing various branches of engineering but also men drawn from other technical professions, including the medical profession.

(ii) Considering the large number of factories and the vast areas over which they are spread, priorities should be fixed, to ensure better attention to areas and industries in which substandard conditions still prevail and to secure strict compliance with the provisions of the law.

(iii) In the enforcement of the various provisions of the Factories Act, particular emphasis should be placed on the social aspects of the legislation.

(iv) In organised industries tripartite agreements should be drawn up on the standard of compliance with the provisions of the Factories Act. Effective machinery should be set up to review the working of the agreements in each group of industries. The working of the agreement would in itself constitute a form of inspection within industry and to the Inspectorate it would indicate the basic requirements from which they might work up for further improvement in working conditions in the industry.

(v) For the proper implementation of the various provisions of the Factories Act and also for providing a centre of information for inspectors, employers, workers, and others concerned with the well-being of industrial labour and to stimulate interest in the application of principles of industrial safety, health and welfare, a National Museum of Industrial Health, Safety and Welfare should be established at an early date in a centrally-situated industrial area. The Museum, as a centre of demonstration with exhibits covering all aspects of working conditions, including health, and with its information section and library, could be the nucleus round which any specialised scheme of training and education in labour problems could be evolved.

(vi) For the effective implementation of the provisions relating to medical supervision and occupational health, the appointment of full-time medical inspectors on the staff of the Factory Inspectorates should be expedited.

(vii) Short courses of instruction in industrial health for those who are working as part-time doctors and for those who are working as medical inspectors should be provided by Government.

(viii) Collection of objective information on occupational diseases and other health problems and teams for carrying out surveys and investigations should be organised as part of the activities of the Factory Inspection Services. The purpose of these investigations should be to assess and evaluate the potential hazards in industrial processes.

(ix) Research and investigations carried out by research institutions of trade associations are usually confined to technical advance in industry, such as new machinery and new processes. Such institutions should be encouraged to extend their activities so as to cover a wider field, such as industrial psychology, and investigations of human problems which are of equal importance for the progress of industry in general.

(x) The Public Health Departments of some of the States, which have Industrial Hygiene Divisions, should maintain the closest liaison with the Factory Inspectorates.

(xi) Employers, Trade Unions and Governments should co-operate in educating the workers, so as to ensure their active participation in all measures taken for their well-being.

(xii) The fees recovered for licensing and registration of factories should be utilised primarily for strengthening the Factory Inspectorates.

B. PLANTATIONS

58. Plantations can be considered to be the largest single labour absorbing industry in the country. Conditions in the plantations remained unsatisfactory for a long time for a variety of reasons. This led to a number of studies undertaken by government agencies to assess the problems of plantation workers. As a result of these studies, steps have been taken from time to time to ameliorate the conditions of work of these workers. The most recent and far-reaching piece of legislation, modelled on the lines of the Factories Act, is the Plantation Labour Act, 1951. There are, however, certain other matters on which action is called for and the lines on which such action is necessary are indicated below :—

(i) The activities of the Controller of Emigrant Labour should be co-ordinated with the proposed organisation to be set up for the supervision of the administration of the Plantation Labour Act.

(ii) To avoid duplication of recruiting staff for plantations, the possibilities of effecting co-ordination in the agencies of recruitment (*i.e.*, Employers' Tea District Labour Association and the State Agencies of Employment Exchanges) should be investigated.

(iii) In pursuance of decisions taken by the Industrial Committee on Plantations and in consultation with the State Governments concerned, the Ministry of Labour has recommended certain steps for checking the evils of the Kangani system of labour recruitment in South India. This system should be abolished as soon as possible.

(iv) To supplement the earnings of plantation workers, cottage industries for the manufacture of implements required for plantations should be established. A portion of the grant given by the Central Tea Board can be utilized for the purpose. If necessary the Tea Board should be persuaded to increase this grant. Care should however be taken to see that the cottage industries do not interfere with the normal working of the plantations.

(v) The application of the Provident Fund Act to plantations should be examined in the light of the experience gained by the working of that Act in other fields.

(vi) There is a considerable leeway to be made up in the provision of housing to workers. Employers should be persuaded to provide houses as agreed to in the tripartite conference and the Government should extend to them the necessary help in procuring building materials, etc.

(vii) Minimum qualifications for doctors serving on tea estates of a certain size should be prescribed under the Central Rules to the Plantation Act.

(viii) The experimental Research Station at Toklai should be strengthened for undertaking studies in the human relations aspect of the industry.

(ix) The priorities as to welfare work on plantations expected of the employers should be decided on a regional basis. For example, assuming that education, health and housing of workers are the main items of welfare, in cases where plantation housing comes up to the standard of housing in adjoining areas, the planters should be asked to provide education and health facilities. In cases where adequate health provisions are there, the emphasis should be on the other two.

(x) In the case of small plantations welfare facilities should be the responsibility of a group of such plantations.

IV. EMPLOYMENT AND TRAINING

59. Effective utilization of man-power, having regard to the requirements of both industry and workers, is a question of national importance. Production depends upon a steady flow of labour of requisite skill in required quantities. This entails the collection and dissemination of information regarding man-power resources, organization of an efficient employment service correct appraisal of the different types of skill required and the provision of facilities for training of workers both to increase their efficiency and to make up deficiency in particular branches of technical personnel. Progress has been made in recent years in some of these directions. The main steps which should be taken to bring about an improvement in the present methods of recruitment, employment and training of personnel are :

(a) More attention should be given to the improvement of the internal recruiting arrangements made by individual concerns so as to eliminate completely exploitation of workers. In this regard, the possibility of extending the schemes of decasualization of dock workers and of textile workers in some of the States to other industries and centres should be investigated.

(b) The employment exchange organisation set up by the Government has been rendering useful but very limited service. An enquiry should urgently be made to examine what changes in character, methods and organisation of the service would help to put the system on a sound footing.*

(c) Although the correct assessment of long-term and short-term requirements of different types of skilled man-power both in its technical quantity and quality is important from the point of view of the expanding industries and of several development projects included in the Plan, very little work has been done by way of conducting man-power surveys in the country. A beginning should be made by undertaking a pilot study where major schemes are likely to be undertaken. The Director-General of Resettlement and Employment should select suitable regions for such study and conduct an informative and statistical survey assessing the labour requirements and employment opportunities.

* Since the making of this recommendation, an Enquiry Committee has been set up to examine all aspects of the Resettlement and Employment Organisation and offer recommendations regarding its future.

(d) The value of provision of technical and vocational training has been gaining recognition only recently. Facilities provided through the technical and industrial schools, the training centres of the Ministry of Labour and the apprenticeship and training arrangements in industrial undertakings have remained by and large un-co-ordinated. The All-India Survey which is being conducted by the Director-General, Resettlement and Employment, should help to bring about the necessary co-ordination. Proper tests and standards should also be laid down. In any such training scheme the problem of the unemployed worker should receive special consideration. This will chiefly be in the form of adequate provision of retraining facilities with due regard to the prospects of future employment and the establishment of vocational guidance and employment counsel services.

60. Another difficulty in the way of increase in production and reduction in costs is that several industries are faced with labour surplus to their requirements. The problem of rationalisation has so far proved difficult of solution. Notwithstanding the imperative need to reduce costs by rationalising industrial processes, the working class has strongly resisted it because of the consequent displacement of labour. It is now possible to reconcile the conflict and facilitate the progress of rationalisation on the strength of the following safeguards :—

- (i) Musters should be standardised, and work-loads fixed on the basis of technical investigations carried out by experts selected by the management and labour. Side by side working conditions should also be standardised. In the case of new machinery, a period of trial may be necessary before standardisation is effected ;
- (ii) Wherever rationalisation is contemplated, fresh recruitment should be stopped and vacancies due to death and retirement should not be refilled ;
- (iii) Surplus workers should be offered work in other departments wherever possible without causing a break in service and without bringing down their emoluments as far as possible ;
- (iv) Having regard to the position regarding raw materials, the state of the capital market, the availability of capital goods and the demand for the products of an industry, wherever the conditions of the industry permit, new machinery should be installed ;
- (v) Gratuities should be offered as inducement to workers to retire voluntarily ;
- (vi) Retrenchment should be effected from amongst persons who have been freshly employed ;
- (vii) Where management and labour agree, the possibility of working for seven days in a week may be explored as a temporary measure ;
- (viii) Workers thrown out of employment as a result of rationalisation should be offered facilities for retraining for alternative occupations. The period of such training may extend upto nine months. A training scheme should be jointly worked out by Government, employers and workers ;
- (ix) The maintenance of workers during the training period should be the responsibility of the management, whereas the cost of training should be borne by the Government ;

- (v) Full use should be made of the possibilities of utilizing surplus labour in various projects undertaken by Government;
- (xi) Incentives for sharing the gains of rationalisation through higher wages and a better standard of living should be provided. Where such gains are made through the additional efforts of workers, they should receive a share in the resulting benefit, most of which should pass to workers where wages are below the living wage. Where there has been some capital investment by the management, this should be taken into account in distributing the workers' share. The object is to facilitate the workers attaining a living wage standard through acceptance of rationalisation.

V. PRODUCTIVITY

61. Considerable attention has been focussed on the productivity of labour in recent years both in this country and abroad. Employers in India have complained that productivity per worker has been going down. Workers contest this allegation with equal vehemence. It is, therefore, necessary that scientific investigations regarding these claims should be undertaken. Such investigations pre-suppose the existence of trained personnel, reliable industrial and labour statistics and a scientific attitude on the part of organisations of employers and workers. None of these conditions exists in the country today and much preparatory work is needed. The first step is to evolve methods for carrying out productivity studies under Indian conditions before the share of the different factors in the causation of high or low levels of productivity can be allocated on the basis of such studies. It is therefore suggested that a team of productivity experts should be invited under the Technical Assistance Programme and that this team should be charged with the responsibility of training a sufficient number of officers from Government, industry and trade unions in developing methods of productivity. As a result of discussions between the Labour Ministry and the Planning Commission, and on a request made by the Labour Ministry, the I.L.O. has formulated proposals for technical assistance in the field of systems of payment by results and productivity. The experts to be sent out by the I.L.O. would undertake studies in the textile and engineering industries. After making a preliminary selection of the undertakings in which the studies are to be carried out, the experts would undertake a thorough analysis of the existing organisation and methods of work, job classification and wage scale with a view to suggesting improvements designed to increase efficiency and productivity and to improve working conditions. Indian experts from Government, employers and trade unions would be associated in this work. A limited number of persons from establishments would also be trained by the experts.

62. Closely allied with this subject is the training-within-industry programme. These T.W.I. methods enable supervisors to play a vital part in the operation of the industry. The scheme is intended to improve supervisory skill by three separate programmes ; Job Instruction, to develop skill in instructing workers in their particular operations ; Job Relations, to develop skill in the management of personnel and Job Methods, to develop skill in improving

working technique. The Ahmedabad Textile Industry's Research Association with the assistance of the I.L.O.'s Asian Field office on Technical Training, has carried out some valuable experiments in one of the textile mills of Ahmedabad. The supervisors and the heads of the departments were trained in the technique of " Job Instruction " by the I.L.O. experts on training-within-industry. The results of the experiments have shown an increase in production from 7 per cent to 18 per cent in different sections of the Spinning Department and 11 per cent to 30 per cent in different sections of the Weaving Department.

63. Much of this valuable work will be lost after the departure of the experts unless permanent arrangements are made to carry it on afterwards. This should be part of the function of the Labour Ministry. Future action should be on the following lines :

(a) Experts on training-within-industry should be invited under the Technical Assistance Programme to impart training in these methods.

(b) A sufficient number of officers from the Labour Ministry, employers' organisations and trade unions should be trained in the methods of productivity, payment by results, and training-within-industry. They will be mainly responsible for imparting training to a sufficient number of persons in different industries. Productivity and training-within-industry schools should be organized.

(c) An Advisory Committee consisting of representatives of employers' organisations and trade unions should be set up to advise the Ministry on all matters pertaining to these subjects.

(d) The work should be carried out in close co-operation and with the help of institutes and firms of industrial consultants engaged in similar studies.

(e) Regular conferences of managers, technicians and trade union officers for discussion of all the aspects of these methods should be organised.

(f) Side by side with the studies in the textile and engineering industries, in consultation with experts such information as may be necessary should be collected concerning further industries to which the studies should be extended. On the basis of such information a regular programme of extension of productivity and training-within-industry methods for the next few years should be drawn up.

CHAPTER XXXV

HOUSING

INTRODUCTORY

1. THE HOUSING problem has become acute in most industrial regions of the world since the last war. There is increasing recognition everywhere of the close relation between housing and the health and well-being of the people. Actually, over a number of years, shortages on a large-scale have developed and conditions worsened a great deal. Efforts made to solve the problem were handicapped by the difficult economic situation prevailing during these years. Private enterprise has proved incapable of meeting the needs and the State has had to assume direct initiative and responsibility in this field to an increasing extent. In some highly industrialised countries, housing accommodation has been provided to a large extent by heavy subsidies from the State in respect of houses of standard design for low-income groups which are not an economic proposition in most countries at present on account of the high cost of construction, building materials and development.

CONDITIONS IN INDIA

2. In India the situation has become particularly serious on account of the large increase of population since 1921. The percentage increase of population in the last three censuses has been 11%, 14·3% and 13·4% respectively. During the same period the growth of population in urban areas is estimated at 21%, 32% and 54% respectively. The heavy shifts of population from the rural areas reflected in these figures have occurred on account of the lack of adequate opportunities for employment in the villages and the growth of industry and business in towns with the attraction of relatively high wages and various kinds of amenities. The second world war helped the growth of urban population by setting up a number of war production plants. The labour population engaged in them did not, as a rule, go back to the villages when these plants ceased to operate at the end of the war. The increasing unemployment and underemployment in agriculture have helped this tendency. Since 1947 when the country was partitioned there has been a very heavy influx of refugees who have, on the whole, tried to settle in the urban areas. The supply of houses on the other hand did not keep pace with the increasing demand. Private enterprise, which has been the primary source of building activity so far, tended to shrink on account of scarcity and high price of building materials during and immediately after the war. The enactment of legislations controlling rents and requisitioning premises had also a deterrent effect on private enterprise in building. Pressure on the existing accommodation, therefore, progressively increased leading to evils of over-crowding, deterioration of housing estates and a variety of malpractices in relations between landlords and tenants.

3. Most of the towns in India have grown up haphazardly. They have a large proportion of sub-standard houses and slums containing insanitary mud-huts of flimsy construction, poorly ventilated, over-congested and often lacking in essential amenities such as water and

light. This is specially so in the large industrial cities. The disgraceful sights presented by the *ahatas* of Kanpur and the *bustees* of Calcutta are conspicuous examples of this state of affairs. These conditions have developed because of insufficient control over building activity by the State or municipal authorities. Local authorities have been generally indifferent to enforcing such bye-laws regarding building and sanitation as have existed. Their own resources have been too meagre to permit any development work worth the name.

4. Rents have been generally high, but in pre-war years sharing of tenements by several people or even families in conditions of extreme over-crowding reduced the burden on the individual to some extent. But during and after the war, landlords, fully conscious of the scarcity value of accommodation, began to realise rents at much higher rates, sometimes wholly out of proportion to the capital outlay. Very often consideration money or premium, known as *pugree* or *salami*, was charged for letting out house property. The State Governments attempted to control rents and to prevent eviction of tenants by means of special legislations. While the tenants could be given some protection against eviction, the attempt to control rent, specially in the case of new comers, did not prove very successful, generally for the same reasons which led to the failure of price control of essential commodities. Requisitioning of house properties by Governments, both Central and State, during and after the war to accommodate their offices as well as officers and, in some cases, for allotment to private citizens led to a further contraction of building activity of private landlords and thus aggravated the shortage.

HOUSING BY GOVERNMENTS AND PUBLIC BODIES

5. In India, the necessity of providing accommodation for their own employees specially in smaller towns or out of the way places has been long recognised by Governments, both Central and Provincial, and some housing activity of this description has been a regular feature throughout. Of late, it has also been realised that housing for low-income groups, who are not necessarily Government servants, will have to be undertaken, at least in the bigger cities, to cope with the acute shortage of accommodation. Among the State Governments, Bombay took a lead in 1921 by establishing a Development Department to reclaim land, to construct 50,000 one-roomed tenements and to organise the supply and distribution of building materials to cope with the growing shortage of houses in Bombay city. This Department had to be closed down soon after it had built only 15,000 tenements. The cost of construction proved very high and workers could not afford to pay the rent which was fixed by the Department to cover the interest and maintenance charges of these buildings. The Bombay Government resumed their activity in this field in 1949 by setting up a special Housing Board with the object of building houses for industrial workers and other low-income groups, developing land, and assisting in the production and distribution of building materials. The Board, which was set up by legislation, was given a loan of Rs. 4.37 crores upto March, 1952 to provide its initial capital. It has constructed 7,000 tenements for industrial workers and low-income groups and over 9,000 tenements for displaced persons out of an allotment of Rs. 2 crores by the Central Government. At present it is engaged in developing an area of about 400 acres of *khazan* land for co-operative housing

societies at a cost of about rupees one crore. Of late, the activities of the Board have been considerably curtailed because loans and subsidies expected from the Central Government have not materialised. Other State Governments have not so far taken very active steps in the sphere of housing. Some of them such as Uttar Pradesh, Madhya Pradesh and Hyderabad have set up Housing Boards quite recently. Others such as Bihar and Mysore are considering similar measures. None of these Boards appears to have started functioning yet except in Uttar Pradesh where construction of houses for workers of sugar factories has been taken up out of a special cess levied by the State Government.

6. Improvement trusts in Bombay, Calcutta, Madras and Kanpur have undertaken housing schemes to some extent. Very often these are rehousing schemes for persons displaced by the activities of these trusts in opening up and clearing residential localities. Municipalities have also constructed a certain number of houses, generally for their own essential staff but occasionally for other low-income groups as well. The total number of houses constructed by local authorities is reported to be 18,771. The main difficulty in the way of a more ambitious programme of construction has been the lack of funds. Most of the improvement trusts have no independent sources of revenue and have to depend on grants from State Governments or subventions from municipalities. As for municipal finance, it is generally in such a deplorable condition that few municipalities can provide even the minimum service to which the rate-payers are entitled, and can scarcely venture into such costly projects as housing schemes for low-income groups.

7. The activities of the Central Government till quite lately were confined to providing houses for their employees, particularly in essential services connected with communications and transport. The Indian railways have done pioneering work in this line and the total number of houses constructed by them up to the end of March, 1951, was 2,75,917 of which as many as 1,97,535 were meant for low-paid railway employees. The Railway Board have a further programme of construction of accommodation for their staff at a cost of about Rs. 3.7 crores in 1952-53 and about Rs. 4 crores a year for the rest of the period of the Five Year Plan. The Ministry of Defence also provide accommodation for their employees in various parts of the country. Up to 1949 the number of houses constructed for ordnance workers, for instance, was 22,340 the total labour employed in ordnance factories being only 52,864. The Posts and Telegraphs Department have also undertaken construction of houses for their staff. State industrial undertakings, such as the fertilizer factory at Sindri, the locomotive works at Chittaranjan and the aircraft factory at Bangalore have also constructed houses to accommodate their staff.

8. It is in connection with the construction of houses for refugees from Pakistan that the Central Government first undertook a large-scale housing programme for persons other than their employees. A major situation was created when as a result of the partition of the country about 75 lakhs of displaced persons came to India from Pakistan and had to be provided with accommodation of some sort. The problem has been tackled to a great extent and well-planned colonies and town-ships in various parts of the country have been developed where not only reasonably comfortable accommodation but also local employment

in industry and trades has been provided. The total number of houses completed up to June, 1952, was 94,200 for displaced persons from Western Pakistan. Another 17,300 houses were under construction. In addition, individual displaced persons constructed 37,000 houses with financial assistance from Government. Among major colonies which have been set up are Ulhas Nagar near Bombay and Sardar Nagar near Ahmedabad; Gobindpur and Hastnapur in Uttar Pradesh; Chandigarh, Faridabad and Nilokheri in the Punjab. For the displaced persons from Eastern Pakistan, townships are under construction at Fulia and Habra in West Bengal and others in Assam and Bihar. Up to the end of June 1952, 7667 houses had been constructed by Government for the displaced persons from Eastern Pakistan. The total expenditure on housing for displaced persons incurred up to the end of March 1952, by the Central Government, was Rs. 48 crores. The efforts of Government to rehabilitate displaced persons are not yet over and additional funds are being allocated for the purpose. One outcome of this activity is the impetus for bold experiments in new materials and modes of construction with a view to effect utmost economy. Thus, the Punjab Government built nearly 4,000 houses in stabilised soil with cement plaster on both inner and outer wall. The Ministry of Rehabilitation experimented with the construction of traditional types of houses at Nilokheri, Faridabad and a number of other towns in the Punjab and West Bengal, by organizing the production of all building materials and components and labour under Government auspices, thereby eliminating the services of contractors. The cost of construction was considerably reduced as a result; at Nilokheri it came to Rs. 4/8/- to 4/12/- per sq. ft. of the plinth area as against Rs. 7 per sq. ft. with standard materials and Rs. 6/- per sq. ft. with inferior specifications by the Central Public Works Department. In West Bengal also housing at Fulia showed the cost to be Rs. 4/13/- per sq. ft. of the plinth area.

PRIVATE ENTERPRISE

9. In respect of provision of houses for their workers, the employers have not a uniform record. A number of them have appreciated the necessity of providing accommodation for their workers in and around the work-site in the interest of efficiency as well as for securing a steady supply of labour. During and immediately after the war, several large concerns which had made considerable profits during the period invested part of their earnings in providing better living conditions for their workers. Some of them were prevented from doing so because they could not obtain land at reasonable cost and municipal services could not be assured. On the whole, construction of houses by employers in post-war years has fallen short of expectation. Where accommodation has been provided it has not always been of sufficient size or of satisfactory quality. The employers have generally taken the stand that not they but the State has the responsibility for providing houses for the working class and that apart from their other handicaps, they have not sufficient means for investing in house building. A few instances of the efforts made by the employers to solve the housing problem of labour may be referred to here. In November, 1950, the Industrial Committee on Plantations decided to adopt two-room standard for all housing in plantations in Northern India and called upon planters to put up houses for 8% of their labour every year. About 25,000 houses were built in 1950-51 in accordance with this scheme which is still in progress. From the Coal Mines Welfare Fund construction of standard types of houses for

miners in a big colony at Bhuli near Dhanbad was undertaken and in 1948-49, 1566 two-room tenements were constructed at a cost of about Rs. 54 lakhs. These tenements were let out at a concessional rate of Rs. 8 per month, of which the worker paid only Rs. 2, the balance being met by the mine-owners. The jute industry appears to have put up the largest number of houses for its workers. Statistics of houses constructed by different industries are not available but, some time ago, a total of 4,28,970 workers were reported to have been provided with accommodation by employers.

10. Co-operative housing societies have attempted, to a limited extent, to provide accommodation for middle and low-income groups. The Madras and Bombay States have been the centres of co-operative activity in this direction. In Madras about 4,000 houses were constructed upto August, 1950, by 273 co-operative building societies. About 12,000 houses were also under construction. In Bombay 3,500 houses were constructed in 1948 and 229 houses were under construction by 315 societies. In Uttar Pradesh 136 societies were registered by 1949 and were provided with facilities by way of sites and loans at low rates. The Textile Labour Association at Ahmedabad constructed 200 tenements and organised workers into co-operative housing societies for providing suitable accommodation for them on hire purchase system. Originally 8 such societies were formed to which 8 more were added after the last war. The major difficulty which faced the Association was paucity of funds and the inability of the Bombay Government to provide substantial assistance. Similar difficulty about obtaining loans at low rates has been experienced by co-operative building societies in other States as well.

11. The bulk of the building activity throughout has been in the hands of private enterprise. But for a long time it has not been able to keep up with demand. The trade depression of 1931 dealt a severe blow to the building industry; the level of construction fell between 1931 and 1939. During the war years and immediately thereafter both manpower and materials became scarce and the situation was further aggravated by a phenomenal growth of the urban population. A great defect in private construction, particularly for the low-income groups, is that too often only the barest amenities and services are provided and sometimes, as in the slum areas, even such minimum amenities are altogether absent. The lack of vigorous enforcement of building regulations by municipal authorities has been a potent source of evil and private builders have generally put up houses with little regard for sanitation and comforts of tenants.

ESTIMATE OF HOUSING SHORTAGE

12. Reliable statistics of the number of houses in urban areas are not available. While construction of houses remained almost at a standstill for several years on account of the war and post-war difficulties, urban population grew steadily. The advance census figures of 1951 show that in the decade 1941-51, while the rural population increased by 7.4% the urban population increased by 53.77%. The corresponding figures of the previous decade were 12% and 32.1% respectively. The Planning Commission made an attempt to obtain a rough estimate of housing shortage in the principal industrial towns. Information received in respect of 37 such towns with a total population of 17,14,560 engaged in large-scale

industries shows that the approximate number of industrial workers, who are in immediate need of accommodation, is 4,54,900. The Environmental Hygiene Committee estimated the shortage as 18.4 lakh houses in urban areas in addition to 10 lakh houses for displaced persons from Pakistan. According to the advance census figures of 1951, the population of 74 cities with one lakh or more inhabitants increased in the decade ending in 1951 by about 74 lakhs. Population of towns with 5,000 to one lakh inhabitants increased by 140 lakhs. It will thus be seen that to house this increased population considerable building activity will have to be undertaken.

HOUSING POLICY

13. The subject of housing is not specifically mentioned in the seventh schedule of the Constitution of India which deals with matters coming within the purview of the Union and State Legislatures. In so far as housing for industrial labour is concerned, item 24 of list III may be said to cover it because it deals comprehensively with welfare of labour. That would bring the matter in the Concurrent List with which both the Union and the State Governments are concerned. The residuary power in relation to subjects not mentioned in the Concurrent List or the State List, however, vests in the Union Legislature. As such the Centre may be said to be directly concerned with the subject of housing in general. In these times, the State cannot afford to confine its role in this field to planning and regulation. Private enterprise is not in a position to do the job so far as low-income groups are concerned. They cannot afford to pay the economic rent for housing accommodation of even the minimum standards. The State has, therefore, to fill the gap and assist the construction of suitable houses for low and middle income groups both in urban and rural areas as a part of its own functions. This would involve a large measure of assistance which may take the form of subsidies on a generous scale and the supply of loans on a somewhat low rate of interest. In view of the gravity and vastness of the problem and the financial condition of the States, the Central Government have to accept a large measure of responsibility for financing housing programmes in the industrial centres where congestion and shortage have become very acute in recent years. Provision should also be made to find funds for middle-class housing schemes, preferably through co-operative building societies. We would, however, suggest that the State Governments, who are being relieved to a large extent of the responsibility for industrial housing, should concentrate on ameliorating conditions of housing in rural areas. Although a great deal cannot be expected in view of the financial limitations, a beginning can be made in taking up pilot schemes of model housing and better living conditions in selected rural areas.

14. The principle of interest-free loan and subsidy for housing schemes are not novel ideas as far as the Central Government are concerned. The Industrial Housing Scheme, which was formulated in 1949, envisaged the issue of interest free loans by the Central Government to the State Governments or private employers sponsored by the latter to the extent of two-thirds of the cost of an approved housing scheme, on condition that the rent charged would not exceed $2\frac{1}{2}\%$ of the capital cost subject to a maximum of 10% of the workers' wages, the employer contributing 3% of the cost of the houses. Early in 1952

a new policy was announced whereby the Central Government were prepared to pay a subsidy upto 20% of the cost of construction, including the cost of land, provided the balance was met by the employers who would also let out the houses to genuine workers at rates suggested under the earlier scheme. The houses thus constructed would remain the property of the employers.

15. That these concessions have not produced the desired effect seems to indicate that the policy of paying subsidies, which has already been accepted, will have to be further liberalised as well as supplemented by loans. We recommend that subsidy should be paid to the State Governments upto 50% of the total cost of construction including the cost of land. The State Governments in their turn will allocate the grant to statutory housing boards. The subsidy admissible to private employers of labour and co-operative societies of industrial workers under this scheme should be limited to 25% of the total cost of construction, including the cost of land. In addition to the subsidies, loans should be made available to State Governments for the balance of the cost at a rate of interest which should only take into account the cost of servicing the loans above the current rate of the Central Government borrowing. Such loans should be repayable in 25 years. The State Governments in their turn are expected to make funds available to statutory housing boards out of the Central loan. Loans should also be admissible to co-operative housing societies of industrial workers and to private employers up to 37½% of the actual cost of construction including the cost of land. Interest should be charged at a reasonable rate having regard to the rate at which similar loans are advanced to the State Governments. The period of repayment in these cases should, however, be 15 years. In regard to co-operative societies, we would further suggest that as far as possible, the subsidy should take the form of grant of developed lands of equivalent value. It will also be necessary in these cases to provide sufficient safeguards in regard to transfer of shares of the members so that by a change in the composition of the society the houses do not come into the possession of a class for whom they are not intended. We further suggest that where co-operative building societies of industrial workers are not in existence, developed building sites may be made available to individual workers who are willing to construct houses of their own, under this scheme on the same terms as are admissible to industrial co-operatives.

16. At the same time we think that provision should be made for loans to co-operative building societies of middle class and other low-income groups who are also in need of financial accommodation no less than industrial workers, though they may not be considered eligible for the payment of subsidy. In their case we think it would be sufficient if loans are made available at reasonable rates of interest. For this purpose we recommend that the Central Government should provide funds for issue of loans to co-operative building societies through the State Governments, who will make the money available to such societies through the State co-operative organisations. The important point is that the difference between the rate of interest at which such loans are made available by the Central Government and the rate at which the co-operative societies are asked to pay should not be more than half per cent in order that the scheme is of substantial assistance to such societies. We lay special emphasis on co-operative housing societies not only because they can mobilise private capital, which otherwise would remain dormant, but because they open the way for aided self-help in the construction of houses which should be encouraged for reducing the cost as much as possible

17. We recognise, however, that for years to come the bulk of the building activity will still have to be undertaken by private enterprise. In building works on a small scale the private builder can often construct at a rate cheaper than public bodies on account of economy in supervision and personal attention to details. We think that the encouragement to private builders should take the following forms :—

- (a) provision of suitable building sites, where possible, at reasonable cost ;
- (b) empowering the statutory housing boards to guarantee loans which a private builder may obtain from a bank or an insurance company to finance construction of buildings, the buildings in such cases being hypothecated to the housing boards ;
- (c) reorganising the present system of distribution of essential building materials, such as steel, cement, coal, etc., and taking steps to reduce the high prices of these materials which are all subject to price control, and for this purpose conducting necessary investigation ; and
- (d) provision on the lines of section 39 of the Delhi and Ajmer Rent Control Act XXVIII of 1952, which exempts premises constructed between certain periods from the operation of the rent fixation law.

At the same time we would suggest that while private builders should be encouraged to the maximum, steps should be taken to eliminate the speculative element in land and to discourage land hoarding in urban areas, for which purpose the taxation structure on vacant lands should be so designed as to make all land hoarding unprofitable. We understand that steps in this direction have been taken in certain States.

18. Building cost can be substantially reduced by adopting improved techniques which have already been tried in other countries. For instance, production of bricks can be mechanised, at least in the bigger cities, by use of power and improved types of continuous process kilns. Similarly building components such as door and window frames and other building equipment can be standardised, thus making mass production possible. Use of modern implements and machinery in building construction has not been introduced in India to any appreciable extent. The attention of the building trade is drawn to the possibility of using various types of machinery and tools which are at present employed in advanced countries abroad for construction purposes.

HOUSING STANDARDS AND ESTIMATES OF COST

19. The immediate need is the construction of a maximum number of houses for removing congestion and providing reasonably decent accommodation in the urban areas within the limited funds available for the purpose. The standards and specifications proposed by various commissions and committees in the past will, therefore, have to be re-examined. The situation being what it is, it seems to us impracticable to insist on standards which it is difficult, if not impossible, to achieve in the present conditions of building cost. All that we

can aim at is that the minimum, from the point of view of health and privacy, is provided, at least for the next few years. On this basis our suggestions are that houses should be built of the two following types :—

(a) In smaller towns, where land value is low and permits a less intensive development : a single-storeyed tenement with a carpet area of 220 sq. ft. and an enclosed space of about 250 sq. ft. The tenement will comprise a living-room, a kitchen, a verandah and a water-flushed latrine.

(b) In larger cities where land value is relatively high : multi-storeyed buildings in which each tenement should have a carpet area of about 240 sq. ft. comprising a living-room and a kitchen. The bath-rooms and latrines will have to be shared by a group of flats. In these constructions density of development should not exceed 20 tenements or 100 persons per acre. As far as possible ramps should replace staircases. It is not desirable to build more than 3 storeys unless lifts can be provided.

20. The minimum standards of services should be as follows :—

- (i) every unit should have at least one water-tap for drinking-water;
- (ii) the latrine should be preferably of the water-borne sanitary type which in a single-storeyed unit may have to be shared between two tenements,
- (iii) effective provision should be made for disposal of kitchen and bath-water through the water-borne system; and
- (iv) electricity should be provided for lighting, wherever possible.

21. We do not favour temporary constructions for relieving housing shortage, because in the long run the recurring liability proves heavier. It is not necessary that construction should aim at long life of houses but that it should provide adequate safeguard against instability and risk of fire.

22. Careful calculations have been made of the cost of construction of tenements of the types proposed. According to an estimate prepared by the Central Public Works Department, the cost of construction of a single-storeyed tenement in the smaller towns would be about Rs. 2,200. The cost of land would vary according to locality, but it may be expected that for a plot of about 55 sq. yds., which is the size contemplated, the cost would not exceed Rs. 500. In the case of multi-storeyed buildings in larger cities, the calculations made in chapter III, paragraph 17, of the Report of the Environmental Hygiene Committee have been followed with an additional provision of 20% as the cost of staircase, balcony, etc. necessary in vertical development. In general the construction of a multi-storeyed unit would cost about 51% more than a single-storeyed tenement. The cost of land may be assumed as Rs. 700 to Rs. 1,000 per unit. The total cost of a tenement in a multi-storeyed building in the larger cities should, therefore, be about Rs. 4,500.

23. In calculating rent the subsidy is not taken into account. On the balance a return of 6½% is considered adequate to meet the interest charge on the loans which may be obtained from the Central Government or other sources, cost of maintenance at 1½% of the cost of

construction and municipal rates and taxes at $12\frac{1}{2}\%$ of rent in the case of single-storeyed tenements and 25% of rent in the case of multi-storeyed tenements. The calculation takes into account the sinking fund charge on the net cost calculated on 40 years' basis. From the point of view of the workers care has been taken to see that, in general, rent does not exceed 10% of the average family earnings. On the basis proposed, the rent of a single storeyed tenement would amount to about Rs. 10 per mensem and of a tenement in a multi-storeyed building about Rs. 18/- per mensem, in both cases inclusive of municipal taxes. It may be pointed out that even now the worker pays as rent Rs. 7 to 10 per mensem for much inferior accommodation than is envisaged under the scheme. There should not, therefore, be any reasonable grievance in the matter of fixation of rent.

24. In this connection we would like to refer to the objections raised in certain quarters to the proposal for subsidising constructions by employers for housing their workers. It has been urged that as the houses will belong to private employers, there can be no justification for subsidising them from public revenues. A closer examination will show that the subsidy, in fact, does not amount to any substantial concession. We do not propose that the employers should have absolute right of ownership in these houses. We suggest that the management of these houses should vest in a committee consisting of the representatives of the employer and employees concerned together with a chairman nominated by the State Government. This committee will be responsible for allotment of tenements and generally for the management of the housing estate. We also propose that a tenant, who ceases to be in the employment of the employer who owns the property, must be given a reasonable time for vacating the tenement. The ordinary trade union rights of access to the workers must similarly be guaranteed. These provisions should be laid down in the agreement to be entered into by the employers when obtaining subsidy and loan from the Central Government. Later, it may be desirable to have the provisions incorporated in the proposed legislation on housing or in statutory rules framed thereunder. It will thus be seen that the ownership which we envisage is of a limited, indeed nominal, character. The employer owns the building only in the sense that his own employees, and not others, are housed therein. The employer also should have no objection to these provisions because by obtaining subsidy and loan at a cheap rate, he can provide accommodation for his employees, which is ultimately to the benefit of his concern. Even the fact that about $37\frac{1}{2}\%$ of the total cost will have to be initially borne by him does not mean any loss. The provision whereby the sinking fund charges are spread over 40 years, ensures recovery of the outlay, because the houses of the specifications proposed would last longer than 40 years. From the point of view of the State too, there should not be any objection to what seems, on the face of it, to be an outright grant to private employers because the immediate object is to house as large a number of industrial labour as possible and it can only be done by inducing capital to be invested in such schemes by an offer to meet a part of the initial cost. There is no other way in which large scale house-building can be undertaken for low-income groups in the present situation. It may be pointed out that the argument has no application in the case of the houses constructed by the State Government and the housing boards which will remain public property or the houses constructed by co-operative societies of industrial workers which will be owned by the society on what amounts to a hire-purchase basis.

HOUSING FINANCE

25. Originally the provision of the Central assistance towards industrial housing in the five year period was Rs. 13·5 crores and it was expected that a contribution of Rs. 15 crores each would be forthcoming from the employers and workers and that the State Governments would provide an amount of Rs. 3·7 crores. It was, however, suggested that an alternative scheme for raising finance would be to utilize money in the provident fund accounts created under the Employees Provident Fund Act. We have reviewed our recommendation in this regard and we are now of the opinion that advantage should be taken of the alternative scheme which was put forward by us, namely, to utilize the provident fund deposits without imposing any additional burden on the industry. It is expected that the contribution of the workers and employers to the provident fund scheme will amount to Rs. 15 or 16 crores annually, out of which, after meeting the cost of administration and withdrawals, a substantial amount can be expected to be available for investment every year. It is also expected that subsidies to the extent of about Rs. 2 crores per annum will be available from the Central revenues. A provision of Rs. 38·5 crores is accordingly suggested in grants and loans by the Central Government for housing schemes during the period of the Plan. Loans will be advanced to private employers and to workers' co-operatives repayable in 15 years and to the State Governments repayable in 25 years but the standard rent for housing estates will be calculated so as to spread over the period of the redemption of loans to 40 years in all cases.

26. Loans at reasonable rates should also be made available: (a) to co-operative housing societies of middle and low income groups referred to in paragraph 16, and (b) to local authorities, for clearance of slums and development of land, which, as will be explained subsequently, is considered an essential part of the housing policy.

TOWN AND COUNTRY PLANNING

27. The solution of the housing problem on a permanent basis has to be linked up with town and country planning. We have already seen how haphazard growth and ribbon development have been caused by inadequate legal powers to control use of land and construction of buildings, though it must be admitted that neither the State Governments nor local authorities have shown a full appreciation of the situation or utilised such powers as they already have to arrest the unhealthy growth. In some States, legislation on town planning has been enacted or is contemplated. It is, however, desirable that there should be a uniform policy in the matter and we recommend that there should be a National Town and Country Planning Act, which would provide for zoning and use of land, control of ribbon development, location of industries in areas considered suitable, clearance of slums, carrying out of civic and diagnostic surveys and preparation of Master Plans.

28. Regional planning has become even more important in view of the implementation of the several river valley schemes and community development projects. Such regional planning should take into account the population, agricultural condition, industries, and communications of a region with a view to secure a balance of population in the particular

area between villages, market towns and industrial centres. Such plans will aim at integrating agriculture and industry in rural areas, and will provide for dispersal of industries from existing centres, development of cottage and small-scale industries, services like medical aid, education and recreation facilities.

SLUM CLEARANCE

29. Slums have grown up in practically all the major industrial cities of India as a result of laxity in enforcing building regulations, the indifferent attitude, till recently, to conditions of living amongst industrial workers and the high land values prevalent in certain cities which led the landlords to exploit their advantage to the fullest. These slums are a disgrace to the country and it is a matter of regret that Governments, both Central and State, have so far paid little attention to this acute problem. No city can be considered healthy which tolerates within itself the existence of a highly congested area with only the minimum amenities of life where some of the poorest elements of population are huddled together in almost sub-human conditions. It has been observed that slums are a national problem. A person who becomes a juvenile delinquent or a tuberculosis case because of slum conditions is no less a national than a local liability. From the national point of view it is better to pay for the cost of clearing slums than to continue to pay the mounting cost of slums and suffer their destructive effects upon human lives and property indefinitely.

30. In certain cities, improvements trusts have made some efforts at slum-clearance. These efforts have been rather sporadic in character, mainly because the improvement trusts, to a greater degree than other local authorities, suffer from limitation of funds. Few of them have independent sources of income and have generally to depend on uncertain grants and subventions from the State Governments and local authorities. The initial cost of acquiring slum areas which under the present state of the law, have to be compensated not only at their market value but with an additional surcharge in consideration of the compulsory nature of acquisition, is almost prohibitive, in most areas, for improvement trusts to undertake any large scale clearance of slums. We consider the clearance of slums to be an essential part of a housing policy because the housing we propose is meant for the class of people who are now generally dwellers of slums. In our view the schemes of housing should proceed *pari passu* with the scheme of slum clearance, at least in the major industrial cities, so that when a housing estate is ready, steps should be taken to remove the slum dwellers to the newly built houses and to proceed with the clearance of the slum area in question.

31. The procedure to be adopted in such cases should be simple and of a summary nature. The competent authority should, after proper survey and enquiry, issue a clearance order. Compensation should be assessed on the basis of the use to which the land was put on the date of the issue of the clearance order. We suggest that no additional compensation on account of the compulsory nature of acquisition should be allowed in case of acquisition of slum areas, because we believe that such compensation ought not to be admissible to properties which are not put to social use. We do not think that the owners of slum areas perform any social service by accommodating large number of the poorest sections of the community in conditions of squalor and filth and we do not see why such social abuse of property should be

compensated for over and above the actual value. We agree, however, with the suggestion that where the owners of slum areas themselves come forward to rebuild and develop their properties within a specified period, on standard plans to be approved by the competent authority, there may be no need for acquiring such lands for the purpose of clearance of slums. We understand that in certain municipal acts provisions to this effect already exist.

32. We have already pointed out that the main difficulty which hampers a large-scale clearance of slums is insufficient financial resources of improvement trusts and local authorities. We, therefore, suggest that out of the provision of Rs. 38.5 crores for housing schemes in the period of the Plan a certain amount should be set apart every year for issue as loans by the Central Government to improvement trusts and other local authorities through the State Government concerned for providing the initial capital for acquisition and demolition of slums. We recommend that this loan should bear a low rate of interest not exceeding half per cent above the rate at which the loan is made available to the State by the Central Government.

RURAL HOUSING

33. The problem of housing in rural areas is a vast one as even now 83% of the entire population of India live in villages. Having regard to the limitations of financial resources, a satisfactory programme of rural housing during the period of the Plan cannot be envisaged. It should, however, be appreciated that the pressure of population shifts towards cities and the slum problems resulting therefrom cannot be solved without ameliorating rural living conditions. Some opportunities for planning in the villages have arisen of late due to reforms in the land tenure system and establishment of community development projects. The problems which confront the rural areas are, however, somewhat different in character and do not call for expenditure of large sums for individual housing units. Unlike in towns, land value, and consequently congestion, is not a principal factor. The immediate needs of the villagers are primarily adequate water-supply, improved communications and arrangements for disposal of sewage and waste-products. Improvement in standards of rural housing should be aimed at primarily by utilising labour and materials locally available with only a modicum of technical assistance. By the use of aided self-help technique, preferably promoted through the Community Projects Administration wherever possible, a significant increase in the standard of living in the villages may be accomplished and the pressure on the cities relieved to a large extent. It seems to us that there are two principal ways in which Government can attempt to improve the standards of housing in the villages, *e.g.* by demonstrating improved standards through model houses built in selected areas and by assisting the villager to build better types of houses within his means and with the resources readily available to him through methods of aided self-help. Aided self-help housing should, however be planned in such a way that improvement over existing conditions is achieved without prematurely advancing beyond the living habits and means of the villagers.

34. With regard to model houses in selected villages, the fifty-five community development projects taken up under the Indo-American Technical Aid Programme offer the most suitable venue for demonstration of improved techniques and designs for rural housing.

Emphasis should be laid on the use of local materials with the object of teaching the villagers how cheap houses can be built which would provide adequate ventilation, remove the proximity of cattle and other animals and provide manure-pits, sanitary latrines and such other simple and essential amenities of decent living. The other method we advocate is, in many respects, a corollary of the first; that is to say, when the villager has learnt the technique of constructing a cheap and decent house within his means, there should simultaneously be a scheme to give practical effect to his desire to build along the lines he has been shown. Self-help in putting up houses has been a feature in Indian villages for generations. It is only necessary to encourage and foster the habit of the villager to build his own house by utilizing local building materials but providing greater amenities than are now available to him. Certain improvements can be readily effected without much additional cost, such as, improved floors by stabilization, simple devices for ventilation, provision of chimneys in the kitchen to draw away smoke, use of erosion-resistant mud plaster for walls and roofs of improved materials and designs. Aided self-help in housing aims at helping people to build their shelters out of materials available in their community. Generations of trials and error have produced very practical ways of using many kinds of local resources including timber, bamboo, lime, clay, stone, gypsum, sand, kaolin, murrum, junglewood, grass and waste products of various types. It is, however, necessary to see that use of local materials does not degenerate into use of unsuitable materials like galvanized iron sheets, packing boxes, salvaged lumber etc. A practical approach, in our opinion, would be for Government to provide technical assistance in the form of skilled supervision and equipment. Pilot projects in selected villages can be taken up to teach the use of local materials. Since our proposals on urban housing practically relieve the State Governments from their share of the expenditure, we think they may be expected usefully to concentrate on improving the standard of housing and living conditions in the rural areas. The provision for housing in the State Plans is of the order of Rs. 10·19 crores. The State Governments may, therefore, provide funds for house-building in rural areas by issuing interest-free or long term loans. The money cost of a house built with the villager's own labour is not likely to exceed Rs. 200 to 300 per unit. The State Governments may also perform a useful function by disseminating information regarding experiments in cheap housing which are taking place in other parts of India, such as, the pot-tiled vaulted roofing in Hyderabad State and stabilized soil construction in the Punjab.

35. In this connection we should like to cite the example of aided self-help in Puerto Rico as being worthy of emulation in India. Conditions in Puerto Rico are similar in many ways to those obtaining in this country. There, a rural development programme included secure tenure of building-cum-garden plots with aided self-help in house construction, in gardening, in water-supply and sanitation development and in multi-purpose co-operative activities. The aid given by the State consisted of equipment, materials and skilled assistance costing \$ 300 per housing unit. The equipment consisted of a truck for hauling gravel and sand from nearby sources, concrete mixers, hand-operated cement block machines and wheel barrows. Building materials in the form of lumber, Portland cement and reinforcing steel were also supplied. The estimated cost of each housing unit, *viz.*, \$ 300 was advanced to the villager as a loan with provision of repayment in easy instalments of about \$ 2·50 a month. The subsidy involved

in the housing aspect of the scheme was the absence of interest on the loan. The cost of the house, if purchased, would have been \$ 1500. Thus by investing his own labour and with a certain amount of help from the State, the villager in Puerto Rico saved \$ 1200 or 80% of the cost of a house of much better quality than he could otherwise afford. Owing to the shortage of cement and steel in India, we shall have to emphasize the need for using local materials. But the principle of aided self-help, as practised in Puerto Rico can, if adopted, result in great improvement in quality at a very low cost.

RESEARCH

36. Research in building techniques and materials is necessary for achieving reduction in cost and improving the quality of work. It is also necessary to standardize building components and invent new materials or synthetic substitutes. In the West, building research has made considerable progress and has resulted in the discovery of new building techniques and finish without any substantial increase in cost. Problem of design, functional requirements of buildings, basic studies of structures, nature and properties of clay, minerals and soil are matters of very great importance which require research and further study.

37. In India, facilities for such research are provided in universities, such specialized institutions as the Central Building Research Institute at Roorkee, the Forest Research Institute and colleges at Dehra Dun, the Indian Standards Institution in Delhi, the Government Test House at Alipore, the Engineering Central Laboratory at Hyderabad, the National Physical Laboratories, the Soil Mechanics Laboratory at Karnal in the Punjab, and the Road Research Institutes in Delhi and Bangalore. There are also the recognized institutes of engineers, architects and town-planners and the association of builders. Industrial undertakings which manufacture building materials such as the Associated Cement Company, the Tata Iron and Steel Company and the Indian Steel and Wire Products also provide facilities for research. There is, however, considerable scope for expansion and consolidation of the work which is being done by these institutions. In particular, stress should be laid on research in the following subjects :

- (a) basic building materials such as bricks, tiles, high tension steel, laminated timber, calcination of ordinary soil for use as bricks and the possibility of utilizing indigenous materials as building components;
- (b) possibility of use of substitutes such as timber, bamboo etc. for steel and other traditional building materials;
- (c) revision of building codes, specifications and factors of safety ; and
- (d) standardization and mass-production methods of building components and materials.

38. In India, experiments in cheap housing have been undertaken in stabilised soil construction in Mysore and the Punjab, hollow sand-cement block construction at Chittaranjan, Bangalore and Ahmedabad, pot-tiled vaulted roof construction in Hyderabad State and cement gunited wall construction by the Western Railways in Bombay. The Government Housing Factory in Delhi has produced prefabricated panels. These experiments offer scope for further research. Constructions in stabilised soil and sand-cement blocks for walls

and pot-tiled roofs are specially suited for aided self-help housing. In India, although pre-fabricated housing has made very little progress so far, there is little doubt that manufacture of prefabricated building components offers considerable scope.

39. It is also desirable to organize the building trade in all its aspects including training of labour and technical personnel of all grades. It is unfortunate that importance of technical training in house-building labour is yet insufficiently realized. In Europe and America, it has been found that training of personnel not only improves the quality of work but expedites the process of building. In India, the building activity in the public sector as a whole is estimated to involve an annual expenditure of Rs. 150 crores. The need of a requisite organisation for training facilities both to economise cost and to intensify the building programme can, therefore, easily be appreciated.

NATIONAL BUILDING ORGANISATION

40. Though research is being carried on in different institutions for cheapening cost and improving building techniques, there is no authority to co-ordinate the results of such research and to make it available in a form which would have ready acceptance with Governments as well as private firms and individuals engaged in building activity. It is for this reason that the setting up of a National Building Organisation as an important activity connected with housing has become necessary. We suggest that such a body should be set up with the following principal objectives :—

- (a) to co-ordinate and evaluate results of research on building materials and technical development now being carried on in different institutions;
- (b) to suggest from time to time subjects of further research and development with due regard to their relative importance and urgency ;
- (c) to incorporate the results of such research in actual building practice;
- (d) to ensure effective utilisation of all available building materials including non-traditional materials;
- (e) to guide industry and public in general on the use of new materials and techniques in building construction;
- (f) to initiate proposals for increased production of building materials and their proper distribution;
- (g) to examine building costs with a view to reduction in overheads and other expenses particularly in the public sector;
- (h) to provide museums or standing exhibitions where methods of cheap houses and techniques for economic building can be displayed, explained and demonstrated;
- (i) to take necessary steps for the standardisation of building components and to organise production and distribution of such standardised components on a large scale;
- (j) to advise Government on technical matters including experiments, research, building education and new techniques; and

- (k) to provide for training in building work and improved techniques and to organise refresher courses for engineers and architects.

41. Such a body should consist of persons who are eminent in their professions and whose decisions would carry weight. It must also have facilities for experiments in various types of building materials and it must be associated with a Ministry of the Central Government which should act as its executive wing to translate its recommendations into actual practice. We are, therefore, of the opinion that the Council of the Organisation should consist of such persons as the Chief Engineer, Central Public Works Department, the Director-in-charge of Civil Engineering in the Railway Board, the Road Development Adviser to the Central Government, the Engineer-in-Chief at the Army Headquarters, the Director of the Forest Research Institute, Dehra Dun, and the Director of the Central Building Research Institute, Roorkee. The Council should be assisted by an advisory body consisting of three experts, respectively on steel and concrete, clay products, and timber and forest products. There should be a whole-time Chairman who will co-ordinate the work of the Council and the advisory body. The National Building Organisation should hold annual conferences on building techniques and designs to which may be invited not only all those who are interested in the subject but, in particular, the Chief Engineers of Roads and Buildings of the State Governments. We consider that dissemination of new ideas through such conferences is of considerable value specially when persons in charge of large constructions are themselves convinced of the suitability of the new techniques and processes.

42. We also recommend the establishment of a permanent museum, or preferably several regional permanent museums, where exhibits of cheap housing can be displayed and the comparative costs, building techniques and methods, use of substitutes for traditional building materials can be studied with profit by engineers, industry and the general public.

HOUSING BOARDS

43. We recommend the setting up of housing boards which would be statutory autonomous bodies appointed by Government and responsible for implementing the housing programme. Such boards should be both Central and Regional and should have an executive body with a president, a whole-time secretary and not more than five other members, some of whom at least should be specialists in town-planning, architecture, and the social, economic and financial aspects of housing problems. The boards may have associated with them advisory bodies consisting of representatives of employers, tenants, building trade and the general public.

44. The principal functions of the Central Housing Board may be indicated as follows :—

- (a) to administer the Central Housing Fund ;
- (b) to activate housing programmes ;
- (c) to administer such housing projects as are directly entrusted to it by the Central Government ;
- (d) to lay down principles for the guidance of the Regional Boards, regarding selection and development of sites for housing schemes and fixation of priorities in the allotment of tenements ;

- (e) to advise on rationalisation on building legislation and to prepare model building bye-laws for adoption by regional and local authorities;
- (f) to suggest action in regard to slum clearance and improvement in environmental conditions of housing; and
- (g) to recommend from time to time any legislation or amendment of existing legislations which have a bearing on the problems of housing, town and village planning fixation of rents and such allied subjects.

45. There should be a Regional Housing Board for each State where there is an active housing programme; but in suitable cases, there may be more than one board in a State. The principal functions of these boards may be indicated as follows :—

- (a) to administer the Regional Housing Fund;
- (b) to activate the State building programme;
- (c) to collect information regarding housing needs of different classes of people and to undertake surveys for the purpose;
- (d) to undertake the construction of houses in selected areas according to approved plans;
- (e) to allot tenements to workers and other low-income groups in accordance with the policy laid down by Central Housing Board;
- (f) to establish new townships and industrial suburbs and to prepare Master Plans for the same;
- (g) to undertake and encourage slum clearance and improvement of existing conditions of housing within their jurisdiction;
- (h) to undertake maintenance of houses and other properties belonging to the Board and to realise rents for the same;
- (i) to encourage self-builders both in the shape of co-operatives and individuals;
- (j) to organise building trades and to provide facilities for vocational training for building labour;
- (k) to guarantee loans taken by private builders for house-building, provided adequate securities are furnished; and
- (l) to organise training for building-labour generally and in specialised types of work, such as laying patent-stone floors, reinforced cement concrete roofs and beams, etc.

46. The housing boards which we envisage should be statutory autonomous bodies. It will, therefore, be necessary to provide them with independent sources of income in addition to grants and subsidies which may be made available from the Central or the State Exchequer. While it is true that for many years, the Central Government will have to subsidise the construction of houses for the lowest-income groups and also to provide funds in the shape of loans, it is our intention that the housing boards should be financially self-supporting to a large extent so as to undertake housing programmes on their own, if not

for the lowest-income groups, at least for the middle classes. In States where improvement trusts have been set up, it may be considered whether their functions cannot conveniently be amalgamated with those of housing boards, the aims and objectives of both the organisations being more or less similar.

47. The principal sources of revenue of housing boards may, therefore, be stated as follows :—

- (a) grants from the Central or State Governments and municipal authorities;
- (b) rents and recoveries from housing estates constructed by the boards;
- (c) sale proceeds of lands acquired for development by the boards;
- (d) betterment levies which the boards may be authorised to charge from persons benefiting from an improvement scheme;
- (e) terminal tax on passengers and goods, arriving by road or rail, in cities where housing programmes have been undertaken within the jurisdiction of the boards;
- (f) issue of housing bonds with the consent of the Central or the State Government, as the case may be, at rates half per cent above the current rate of Government borrowing; and
- (g) loans from banks, insurance companies and such financing institutions on terms to be approved by Central or State Governments;

An additional surcharge on stamp duty on the value of immovable property transferred or mortgaged within the State is also recommended for those States where there is still scope for an increase in the rate of stamp duty.

LEGISLATION

48. We have already indicated the lines on which the proposed Housing Act and the Town and Country Planning Act should proceed. Here we shall confine our remarks to certain amendments in the existing legislation, which are considered desirable. We are of the opinion that the basis of assessment of compensation in the Land Acquisition Act of 1894 requires modification in respect of acquisition of slum areas as well as of lands which will be needed for the housing schemes. At present the cost of acquiring slum areas is prohibitive because not only their market value but an additional compensation at 15% has to be paid in consideration of the compulsory nature of acquisition. It may be that when a slum has been demolished and the area cleared and developed, the land can sometimes be disposed of at a reasonable price, especially if it is situated in the heart of a city. It is not, however, possible for housing boards and improvement trusts with their meagre resources, to make a considerable outlay for the purpose of acquiring slum areas and demolishing slums in the expectation of a reasonable return at a distant date. We, therefore, suggest that the Act should be modified in respect of payment of compensation which should be on the basis of the use to which the land was put on the date of the issue of the preliminary notification. We do not think that any additional compensation should be admissible for acquiring either slum areas or lands required for housing scheme for the industrial workers and low-income

groups. The Act should also be amended so as to provide for a speedier procedure for taking possession of lands on which housing projects are contemplated or where slum areas are to be cleared. Without such a provision neither the housing schemes nor schemes for clearance of slums will be expedited as the normal procedure of land acquisition is often very protracted.

49. We would also suggest that the various State legislations on the control of rent should be made uniform. In order to encourage private construction, without which the problem of housing cannot possibly be solved in the near future, provision may be made to exempt newly-constructed houses from the operation of the rent control legislation for an initial period of, say, 4 years. The civil courts, however, should have jurisdiction, on the application of parties, to fix fair rents (excluding municipal rates) even in such cases on the basis of a reasonable return on the cost of construction, including services. With regard to the acquisition of premises for public purposes, we would recommend that the practice should be resorted to only exceptionally. It cannot be denied that requisitioning of premises on an extensive scale in recent years has had a deterrent effect on the building activity in the private sector. We would, therefore, urge upon Governments, both Central and State, to be cautious in having recourse to requisitioning house properties in times of peace.

CHAPTER XXXVI

SOCIAL WELFARE

THE SOCIAL structure in India has shown strength in endurance, and a unity of basic outlook in the midst of change and vicissitude. This strength has now to be demonstrated in productive and creative endeavour ; and the unity of the people has to be deepened and harnessed for economic development and cultural achievement.

2. The object of social welfare is the attainment of social health which implies the realisation of such objectives as adequate living standards, the assurance of social justice, opportunities for cultural development through individual and group self-expressions, and re-adjustment of human relations leading to social harmony. A comprehensive concept of living standards will include the satisfaction of basic needs like food, clothing and shelter as well as normal satisfactions of family life, enjoyment of physical and mental health, opportunities for the expression of skills and recreational abilities, and active and pleasurable social participation. The achievement of social justice demands co-operative and concerted effort on the part of the State and the people. These objectives are to be achieved mainly by revitalising the nation's life by creating well-organised and active regional communities in rural and urban areas to work co-operatively for national development. Such decentralised community groups will release national energy, extend the scope for leadership, and help to create initiative and organisation extensively in the remotest parts of the country.

3. The aim of social service in the past was essentially curative, and efforts were directed towards relief for the handicapped and the uplift of the under-privileged sections of society. It is now essential to maintain vigilance over weaknesses and strains in the social structure and to provide against them by organising social services. The aim of all social work now has to be the gradual rehabilitation of all weak, handicapped and anti-social elements in society.

4. Some of the important social problems like poverty, ignorance, over-population and rural backwardness are of a general nature and, in varying degree, they are influenced by factors like squalor and bad housing, malnutrition and physical and mental ill-health, neglected childhood, family disorganisation and a low standard of living. For a long time, society has remained apathetic to these conditions ; but with the awakening of political consciousness and the enthusiasm of organisations and workers to improve social conditions, there is a possibility of developing programmes which could gradually remedy the present situation. The economic programmes of the Five Year Plan will mitigate these problems to some extent, but the gains of economic development have to be maintained and consolidated by well-conceived and organised social welfare programmes spread over the entire country. In this chapter it is proposed to consider some of the more important problems of social welfare which need the special attention of both State and private welfare agencies.

5. The principal social welfare problems relate to women, children, youth, the family, under-privileged groups and social vice. The social health of any community will depend a great deal upon the status, functions and responsibilities of the woman in the family and in the community. Social conditions should give to the woman opportunities for creative self-expression, so that she can make her full contribution towards the economic and social life of the community. Problems relating to health, maternity and child welfare, education, employment, and conditions of work are dealt with elsewhere in this report. Some problems of women have to be dealt through social legislation, but other problems pertaining to health, social education, vocational training, increased participation in social and cultural life, provision of shelter, and assistance to the handicapped or maladjusted call for programmes at the community level. As women have to fulfil heavy domestic and economic responsibilities, adequate attention has to be paid to the need for relaxation and recreation both in the homes as well as in the community. The welfare agencies have catered to some extent to the needs of the widow and the destitute woman, but the quality of the service rendered by them and the nature of their work needs to be surveyed.

6. Considering the numbers involved, the needs of children should receive much greater consideration than is commonly given to them. There is a growing demand for child health services and educational facilities. The standard of child welfare services in the country can be improved if the rate of increase in population is reduced. Problems relating to family planning, children's health, infant mortality, education, training and development have been discussed elsewhere in this report. Malnutrition is perhaps the major cause of ill-health and lack of proper growth of the child. The feeding of the child in the early years is the responsibility of the family, and is dependent upon economic conditions and traditional food habits. The nature and extent of malnutrition has to be determined, and resources have to be found to supplement and improve the diet of children through schools and community and child welfare agencies. The problem of children's recreation and development outside educational institutions has received some attention during recent years, but play activities of children are considerably restricted in urban areas on account of the environmental conditions, lack of adequate space, and, to some extent, neglect of this vital need of the child by the family and the community. Not enough is known about the work of private agencies for the welfare of destitute and homeless children.

7. The juvenile courts and children's aid societies have so far touched a fringe of the problem of children's welfare. Certain special aspects may be briefly mentioned. The existing facilities for handicapped and deficient children are far from adequate and suitable agencies have to be created. Hospitals provide treatment for polio, congenital deformities, fractures, bone disorders and other diseases, but there is a need to extend existing services and provide special institutions and care for disabled and crippled children. At present deficient children attend educational institutions together with normal children and seldom receive treatment and special training to enable them to overcome their handicaps. The subject needs to be studied carefully. The problem of juvenile delinquency has already received considerable attention and many of the States have special legislation. Juvenile delinquency may often be the result of poverty and many offences may be traced to the connivance or support of adults.

8. The youth constitute the most vital section of the community. In recent years, young people have had to face and have been increasingly conscious of problems such as inadequate educational facilities, unemployment, and lack of opportunity for social development, national service and leadership. The problems of health, education and employment of youth have been considered as aspects of national problems in these fields. Social welfare is primarily concerned with the improvement of services provided for the benefit of youth by welfare agencies with the object of promoting development of character and training for citizenship and for physical, intellectual and moral fitness. It is necessary to encourage initiative among youth so that through their own organisations, they can develop programmes of youth welfare and national service. Ways must also be found to give opportunities to youth for active participation in constructive activity. Such training and experience will equip them for shouldering the responsibilities of leadership in different spheres of national life.

9. Traditionally, the family has been left largely to its own resources to deal with most of its problems, although in some cases it may be assisted by the larger community groups (such as caste) to which a family may belong. General problems relating to health, education and employment have been considered in the relevant sections of this report. Questions relating to status and rights, property, inheritance, etc., are the subject of social legislation. The gradual break-up of the joint family and the emergence of the small family has increased its economic problems and burdens. Family responsibilities have now to be borne at a comparatively younger age by the head of the small family than happened in the joint family. This creates the need for greater guidance and assistance in dealing with family problems. The increasing complexity of the social situation and handicaps arising from physical disability, ailment or unemployment render it more difficult for the family to provide a sense of security to its members. This fact suggests a number of problems which, along with other problems such as divorce, desertion, and treatment of mal-adjusted members of the family, need to be studied carefully if welfare agencies are to develop suitable methods of treatment for guiding and assisting those in need.

10. There are a number of under-privileged communities such as the scheduled tribes, scheduled castes and other backward classes including criminal tribes. The problems of poverty, ill-health, and lack of opportunities for development affect them to a larger extent than many other sections of the society. The subject is considered in a separate chapter.

11. Every community has its share of those who are physically handicapped such as the blind, the deaf and dumb, and those who are crippled and infirm. Reliable statistics are not available about the extent of the population which suffers from such handicaps. A certain number of welfare agencies are already working in this field, but little information about their resources and their ability to deal with the problem is at present available.

12. The main problems to be considered under the description of social vice are prostitution, crime and delinquency, alcoholism, gambling and beggary. These problems have existed for a long period, although necessarily their nature and extent vary according to the prevailing social and economic conditions. Some of them have to be dealt with largely by

local communities, and the approach and treatment have to be varied from place to place. The character and magnitude of these problems of social defence have to be determined carefully before the value and efficacy of the existing agencies and programmes could be assessed. Social legislation deals with many of the social evils with a view to controlling and even eradicating them, but its actual implementation needs to be watched. Among the practical problems to be resolved are the demarcation of the relative roles of State and private agencies, determination of the machinery of enforcement, estimation of the resources required, examination of methods, development of correct programmes, and creation of public opinion in favour of an objective and dispassionate approach to the problems of social vice.

AGENCIES

13. As the social structure becomes more complex, the State is called upon to play an increasing role in providing services for the welfare of the people. The Central Government, the various State Governments and local self-governing bodies, each in its own sphere, have to ensure that they have at least the minimum administrative machinery for dealing with social problems. What form this machinery takes will depend on their particular circumstances and requirements, but it is certain that without the necessary machinery they will not be able to pursue their programmes.

14. The functions of the social welfare machinery of the Central and State Governments may, for instance, be :—

- (1) to study the need for and the efficacy of social legislation,
- (2) to execute programmes of social welfare,
- (3) to assist, both directly and through other agencies, the development of social services, the study of social problems, and the creation of trained personnel for social administration,
- (4) to assist specialised and private agencies through guidance, and financially, and to protect the interest of society by a measure of regulation and control,
- (5) to initiate pilot projects, or help field organisations to develop such projects, in order to demonstrate the efficacy of programmes, methods, leadership and organisation,
- (6) to promote initiative in and improvement of social services by supplying information, materials, publications, audio-visual aids, etc., and
- (7) to take over social services of vital importance initiated and organised by private agencies when these develop beyond their ability to manage.

15. Local self-governing bodies can do much to co-ordinate welfare activities in their areas and promote co-operation between their departments and the work of private agencies. Local committees or councils of social service agencies could undertake activities such as the following depending upon the resources which are available or can be raised :—

- (a) taking effective measures to alleviate suffering, especially by providing emergency relief ;

- (b) organising and assisting community centres ;
- (c) improving housing conditions, clearing slums and providing welfare services and special amenities for communities residing in slum areas ;
- (d) promoting child welfare activities ;
- (e) providing parks, playgrounds and other amenities for physical recreation and welfare ;
- (f) supporting private social service agencies and institutions for social education, women's welfare, youth welfare, and welfare of handicapped persons and under-privileged communities ; and
- (g) creating public opinion and assisting the vigilance authorities in the control of social vice and beggary.

16. The inter-relationship between the various activities has to be emphasised and the necessary co-ordination assured both in the Central Government and in the States. One aspect of this co-ordination would be to secure that legislation relating to social problems follows broadly similar principles. In cases where grants-in-aid are given by a State authority to a private agency, it is desirable to lay down general directions for improving the content of the programmes and their administration. A measure of supervision and inspection should also be provided in order to maintain standards of efficiency.

17. A major responsibility for organising activities in different fields of social welfare, like the welfare of women and children, social education, community organisation, etc., falls naturally on private voluntary agencies. These private agencies have for long been working in their own humble way and without adequate State aid for the achievement of their objectives with their own leadership, organisation and resources. Any plan for the social and economic regeneration of the country should take into account the service rendered by these private agencies and the State should give them the maximum co-operation in strengthening their efforts. Public co-operation, through these voluntary social service organisations, is capable of yielding valuable results in canalising private effort for the promotion of social welfare. One of the most important tasks of the State is to conduct a survey of the nature, quality and extent of service rendered by voluntary agencies in different parts of the country, to assess the extent of financial and other aid that they are in need of in order to develop their programmes of work, and to co-ordinate their activities. A sum of Rs. 4 crores has been provided as grants-in-aid to voluntary social service organisations for strengthening, improving and extending the existing activities in the field of social welfare and for developing new programmes and carrying out pilot projects. It is envisaged that this fund of Rs. 4 crores should be administered by a board to be set up by the Central Government to which a great deal of administrative authority will be devolved. The board should be predominantly composed of non-officials who have actual experience of field work in promoting voluntary welfare activities.

18. It is necessary to co-ordinate the programmes of various agencies so as to guide them into broad streams and bring added strength and intensity of purpose to welfare activities. Such co-ordination calls for a common approach and a co-operative outlook on the part of

the organisers of voluntary social work. Further, it will be necessary to induce agencies to agree to subordinate their individual interests to some extent and thus make collective effort possible not merely in the execution of programmes, but also in the economic and rational use of personnel. Such co-operation could also lead to joint effort in obtaining resources. Co-ordination need not involve on the part of the co-operating organisations loss of individuality or of freedom to organise and to carry out programmes. Co-ordination will have to be of two types. In the first place, there may be functional co-ordination on the part of national organisations striving to achieve specific objectives like physical fitness, child welfare, youth welfare, social education, community organisation, etc. Secondly, there may be effective co-ordination of effort on the part of agencies functioning in the same regional area or community, so that the various agencies may serve each area through a common pool of activities.

TRAINING FOR SOCIAL WORK

19. The contribution which social services make will depend to a considerable extent upon personnel and leadership. A general understanding of the philosophy and history of social work, the structure and functions of society, the nature and extent of social problems, the methods and techniques of social work, and of the details of the programmes and how best their results may be assessed, will help improve the quality and efficacy of all services organised by State and private agencies. The training of social workers should of course include knowledge of conditions prevailing in fields in which they are to work, and social workers must possess the spirit of service and the character and energy to execute programmes despite handicaps and limitations and with such resources as may be readily available.

20. There are several schools of social work in India and the setting up of some other institutions on similar lines is being contemplated in some of the States. There are important problems involved in these institutions which require specially qualified and experienced personnel, careful selection of candidates for training, special training for fields in which there is scope for employment, and adequate opportunities for field-work experience. Trained social workers are needed in large numbers for rural areas. It should be possible for the existing schools of social work to draw students from rural areas and to arrange for their training in the field in selected centres organised by rural welfare agencies. Universities and colleges in or near rural areas could also develop training programmes for rural welfare. Agricultural colleges could introduce intensive social welfare courses and field-work programmes as part of their curricula. Similar institutions with greater emphasis on social anthropology could be created in tribal areas.

21. It is not possible for many voluntary organisations in the country to employ highly trained personnel for their ordinary programmes and activities. It is, therefore, necessary to arrange for training at the community level for field workers, instructors and supervisors. The existing schools of social work, specialised social service agencies, social welfare agencies functioning at the national and State level should provide opportunities for such training. Arrangements for 'in-service' training should also be made by the larger voluntary organisations which have worked in the field of social welfare for many years. Further, arrangements have

to be made for the training of voluntary workers who will be needed in large numbers during the coming years. It is especially desirable that voluntary administrative and field personnel should be given some elementary training in social work.

22. The emergence of State social services and of large central organisations to deal with important social problems and the lack of opportunities for higher training in the social sciences within the country indicate the need in selected cases for training and study abroad in specialised fields. It is necessary that persons who go abroad for training should first have sufficient knowledge and experience of Indian conditions and problems.

SOCIAL RESEARCH

23. Scientific research into social problems and fields of social work is at present limited to a few universities and the schools of social work. A provision of Rs. 50 lakhs has been made in the Plan for research and investigations relating to social, economic and administrative problems of national development. Research studies now undertaken are not adequate or extensive enough for the purpose of getting a comprehensive knowledge of basic social problems. It is necessary to stress the need for ensuring that research personnel receive adequate training in methods and techniques. Secondly, it is important that the results of any research that is carried out should be made available to the public. The appropriate machinery for guiding research in the fields mentioned above is at present under consideration. In the field of social research, it will be necessary to give a broad direction concerning the subjects on which research should be undertaken, carry out some important research projects, directly co-ordinate the work of research agencies in so far as this may be necessary, and assist these agencies in improving the quality of their work and bringing the results of research to the attention of the public. Universities, schools of social work, social welfare agencies and special research organisations can co-operate in research projects and in field investigations which could be of practical value in dealing with social problems. Assistance could also be given by way of literature and equipment needed for field research.

RESOURCES

24. The total resources of the country being limited, it is essential to ensure that funds available for social welfare programmes on the part of State agencies as well as voluntary organisations are put to the best possible use. This is a problem to which the proposed social welfare board could give detailed attention. While the State may assist suitable voluntary agencies, the principle of self-help should be applied to social welfare, and the resources needed should, as far as possible, be obtained from the local communities. Social services are organised to carry out specific welfare activities. The total resources required by social service agencies in the country are obtained from State grants, income from endowments, public collections and income from special activities and from membership fees. Due to the

prevailing economic conditions in the country, it is sometimes true that the public response is not as effective as it should be if the various organisations were to carry out their programmes efficiently. The appeal to the public is likely to yield greater results if care is taken to observe some elementary conditions such as the following:—

- (1) the right methods for collection of funds are adopted,
- (2) definite programmes of activities stating the manner in which funds are to be utilised by an agency are placed before the public, together with a psychological appeal,
- (3) the effort of collection is well-organised,
- (4) the appeal is addressed to as wide a section of the community as possible. Full use should be made of various modes of publicity and the public should feel that the cause is one worth supporting, and
- (5) correct reports and accounts are provided and the public convinced of the integrity and the bona-fides of the organisations and the organisers concerned.

25. Funds available with endowments and trusts may be an important method of supplementing resources which the State and private agencies can provide. We, therefore, recommend enquiries by States into this subject which may offer a basis for legislation concerning the use for approved purposes of funds held by endowments and trusts.

SOCIAL LEGISLATION

26. One of the important methods of bringing about progressive social change is social legislation. A good deal of legislation of basic importance has been enacted during recent years. The existing legislation needs to be scrutinised more intensively, especially with a view to finding out to what extent it serves the present social and economic objectives of the nation and to ascertain how far it can deal adequately with current social problems. Some machinery is needed for reviewing existing legislation and suggesting possible modifications, and if necessary, the repeal of obsolete laws in order that all existing legislation may be brought into conformity with the requirements of the Constitution. Social legislation has at times to be punitive in order to protect society from anti-social elements; but wherever possible, the legislation should be preventive and protective, and where it deals with the offender, its approach should be to rehabilitate the individual after eradicating the contributory factors to anti-social conduct.

27. Social legislation cannot by itself deal with social problems in an effective manner unless it is backed by the force of public opinion. Social legislation has also suffered owing to incomplete enforcement. This is especially due to lack of adequate machinery for enforcement, and also because of insufficient resources and personnel both with public and private agencies. Social legislation can be better enforced by associating social service agencies with

agencies set up by the State. As regional communities become organised for social action, voluntary co-operation of the community based on enlightened understanding will go a long way in facilitating the enforcement of the law.

28. A critical survey of the prevailing legislation will suggest how far the legislative provisions are inadequate, to what extent enforcement must be strengthened and the directions in which new legislation is needed. The proposed social welfare board or social research organisation, or any other appropriate agency may undertake a comprehensive survey to study the problem of social legislation. Legislation relating to the prevention of child marriages and the prevention of immoral traffic, certain housing and public health laws, laws affecting tribal areas and communities as also certain criminal laws constitute examples of social legislation which needs to be revised in the light of the existing needs and conditions. Among the laws which have to be enforced more effectively than they are at present are those relating to offences on the part of children, prevention of beggary and the control of prostitution. New legislation is required for the effective operation of social services in various fields. The registration of social service agencies with a view to inspection and sanction of grants-in-aid is one of the primary needs.

WOMEN'S WELFARE

29. In order that the woman may be allowed to fulfil her legitimate role in the family and the community, adequate services need to be promoted for her welfare. The position and functions of the woman differ to a great extent in different communities, and, therefore, community welfare agencies will have to work out their programmes and activities according to the specific requirements of the areas in which they work.

Important problems relating to the status and rights of woman have to be dealt with by legislation. Special organisations on the part of the Central or State Governments for promoting the welfare of women have not yet been developed to any great extent. State programmes for the welfare of women have been mainly confined to the Ministries of Health, but Madras and Uttar Pradesh have given a lead by creating special departments to promote the welfare of women. Well-organised social service departments are needed in the States if they are to initiate more comprehensive programmes of woman and child welfare and achieve better co-ordination between the efforts of public and private agencies. The major burden of organising activities for the benefit of the vast female population has to be borne by private agencies which have already done considerable work for the promotion of women's welfare. The All-India Women's Conference has 37 branches and about 300 'sub-branches' in the country. The National Council of Women in India has 12 major branches, and the Girl Guides Association, the National Y.W.C.A., the Association for Moral and Social Hygiene, and the Trained Nurses' Association in India, are affiliated to it. The Kasturba Gandhi National Memorial Trust does extensive work for the welfare of women and children in rural areas and has representatives to carry out activities in eighteen States. There are numerous

small organisations all over the country which have done valuable work for women. These organisations provide dispensaries and maternity centres, homes for destitute children and shelter homes for women. They also organise programmes for education, recreation and training in handicrafts.

30. Organised efforts are needed to stimulate activities at the community level, both in rural and urban areas. This should be done by community centres, social education agencies, and agencies working for the welfare of under-employed groups, by organising groups of women who could come together for activities such as recreation, education, arts and crafts, and co-operative participation in social and economic activities of the whole country. Groups could also be organised as "mothers' clubs or unions" in all ante-natal and post-natal clinics, milk centres, co-operatives, and as a part of trade union activities. Such groups could especially be organised in slum areas and backward areas and amongst working women and women of backward classes in general. A large number of voluntary workers will be required for such groups, and these could be recruited by women's welfare organisations. Girl guides and girl students in high schools and universities could assist in these activities as part of a programme organised on a national basis. The existing women's organisations in the country could be strengthened if their membership and activities are extended, and if they organise programmes for creating women's organisations in towns and in the larger villages. Such local organisations need trained workers, guidance and assistance which could be given by leading women's organisations through travelling workers, training camps, instructional manuals, and other literature.

31. For various reasons the available statistics on commercial vice are limited and unreliable. India is a signatory to the international agreement for the suppression of traffic in persons and of prostitution which was reached in 1950. However, clandestine prostitution and even brothels continue to exist in the country together with tolerated areas in some of the cities. Clandestine prostitution exists in many forms and the danger of the evil is augmented when the woman is not assured economic security by the family or the community, or when she is psychologically maladjusted in terms of her sexual and material desires, or when her economic activities do not permit a normal family life. This kind of prostitution is further promoted by activities of persons who organise traffic in women and children. Immoral trafficking sometimes takes place as between backward and poor rural areas on the one hand, and the more prosperous urban areas on the other. Inter-provincial trafficking is also not unknown.

32. Certain social evils are products of inherent maladjustments in the social order and their complete eradication needs basic social adjustments. It is realised that such adjustments are only possible when social justice is more effective, there are reduced opportunities for concentration of wealth, exploitation is eradicated, economic conditions are improved, and social morality is established by well-adjusted patterns of common behaviour at the basic community level. The following measures are suggested for dealing with the problem :

(1) an advisory committee should be set up by the Central Government to make proposals and review progress in respect of law and policy in different States relating to the prevention and treatment of social vice ;

(2) enforcement of the law should be more effectively carried out ; measures to enforce the law may include, wherever necessary, the creation of a separate vigilance branch within the police force ;

(3) whenever it is found difficult to eradicate the tolerated areas, adequate arrangements should be made for medical assistance and facilities for the treatment of venereal diseases ;

(4) wherever it is found that clandestine prostitution is in existence, efforts should be made to eradicate soliciting ;

(5) institutions for the protection, care, shelter and rehabilitation of fallen women do not exist in sufficient number, and cases of neglect are frequent. There is a need for more institutions organised by local self-governing bodies and private social service agencies and provision for regulation, inspection and control of homes which should be under the management of trained personnel. Such homes should provide shelter, medical aid and assistance for marriage ; and

(6) there is a need to strengthen existing specialised and private agencies like the vigilance associations and societies for the prevention of traffic in women.

CHILD WELFARE

33. The child, being always dependent, has to be provided for by its parents and the family, the community and the State. Considering the size of the population involved and the nature and complexity of the problem, the total responsibility of welfare has to be borne cumulatively by the family, the regional community, and the State at three different levels. The problem of survival and the high incidence of infant mortality and birthrate has been dealt with in the chapter on Health. The problem of education is dealt with likewise in another chapter. However, certain aspects of the problem of health, growth and care of the child need the attention of social welfare agencies.

34. In a country where poverty is extensive, there is need to supplement the diet of children. Effective ways have to be devised by the State and private agencies to see that the necessary nourishment is received at least by under-nourished children in schools and in established institutions. To augment State resources, an effort should be made by each local community to assist educational institutions and child welfare organisations in supplementing the diet of the child in some way. At present, skimmed milk powder, cases of baby foods, semolina, vitamin tablets, pabulum cereals, codliver oil, etc., are received as gifts from various sources. Efforts to organise collections in kind at the community level could be supplemented by grants-in-aid from charity trusts and local self-governing bodies. It is desirable that State organisations, the Red Cross, the Indian Council of Child Welfare and

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other important national and State organisations for child welfare should co-ordinate their efforts both for the collection and distribution of supplementary foods for children. The five most suitable agencies for the distribution of free foods to children at the community level are (1) milk centres (2) maternity and child welfare centres (3) community centres (4) day nurseries and schools, and (5) play centres.

35. *Feeble-mindedness*—The attention of the educational authorities is naturally concentrated in the early stages on formal education. The problem of feeble-mindedness is gradually beginning to receive the attention of psychologists and educationists in the country. Uptil now there are no adequate institutions in the country for the care and treatment of feeble-minded children. A beginning has been made in dealing with this problem by the Society for the Care, Treatment, and Training of Children in Need of Special Care. A few pilot projects in selected areas could be developed by specialised agencies for child welfare. One of the major handicaps in this respect is the absence of a sufficient number of trained psychologists and psychiatrists and teachers specially trained to deal with mentally backward children. Provision should be made for training personnel as early as possible.

36. *Child guidance clinics*—The first child guidance clinic was organised in India in 1936. Since then a small number of child guidance clinics have been brought into existence in some of the larger cities. It is desirable that at least one child guidance clinic should be brought into existence in every State and, wherever possible, such clinics should be organised by municipalities. The organisation of this important service is also likely to be handicapped due to want of psychiatrists and child psychologists. It is essential to train a number of psychologists and case workers in the schools of social work in order to provide trained personnel for dealing with problem children.

37. *Creches*—An important service which has already made considerable headway in India for the welfare of children is the organisation of creches, day nurseries and other types of pre-schools. In large factories in major cities, already a number of creches are organised with a reasonable standard of efficiency in the interest of children whose mothers work in the factories. In 1950, Bombay had 177 creches with about 3,000 children, Madras had 93 with about 2,334 children, Bihar had 26 with 796 children, Madhya Pradesh had 16 with 360 children and Uttar Pradesh had 7 with 126 children. These figures reveal that only a very small percentage of children of working mothers take advantage of these creches, specially because it is the tradition in India for children to be looked after by other women members of the family. As it is now compulsory under the Factories Act of 1948 to provide a creche in factories employing 250 or more women special efforts may be made by factory owners to induce mothers to send their children to the creches.

38. *Play activities*—Play is a vital need in the life of the child ; and its playlife in the home, school and community environments consists of playthings, companionship, and playground activities. Local self-governing bodies as well as the community should provide play-space for children either as a reserved part of a community playground, or as a separate playground equipped with suitable accessories for play. Only a small number of fairly well-equipped playgrounds are in existence in the country ; and their number needs to be very considerably increased in urban as well as rural areas. Proper maintenance and management of

playgrounds are essential in order to provide necessary guidance, supervision, and protection to children during play hours. Such a playground service could be provided by voluntary welfare agencies and youth and students' organisations.

39. *Children's centre*—In order to extend the scope of children's recreations, the programmes for children's centres are now being expanded so that they can be equipped with playgrounds, indoor space for a children's library, a dramatic hall, and facilities for developing child arts and handicrafts. Such centres may also provide a case work service where it is not possible to organise a child guidance clinic.

40. *Handicapped children*—One of the most difficult problems which deserves urgent consideration is the problem of lone, orphaned, neglected, deserted and destitute children. It is necessary to develop special institutions, children's villages, boys' towns and similar organisations where a large number of such children could be given protection, shelter, care, education and training till they are rehabilitated and can function in a normal way. At present, such institutions are mainly organised by private agencies, and especially by children's aid societies. Most of these institutions deal with a very small number of children, and it is desirable to initiate a number of pilot projects where a large number of children could be brought together under the care of specialised social welfare agencies in the various States.

41. The practice of adoption has existed in India for centuries. Such religious adoptions are not legally controlled. Besides, this benefit is invariably given to the boy. In some cases the orphaned child is institutionalised, or becomes a beggar, or becomes a victim of illegal trafficking and exploitation. Orphanages exist all over the country, both in urban and rural areas. The need to ensure registration, supervision and control of these institutions is now realised, and legislation and machinery of enforcement have to be devised to protect children in institutions organised by private agencies. Such institutions, with the support of the Government, should be able to provide a reasonable opportunity for growth, development and rehabilitation of all the inmates.

42. *Juvenile delinquency*—The complexities of the problem of delinquency and the inadequacy of resources, institutions, and personnel have come in the way of a study of the nature and extent of the problem. At present, only a small number of delinquent children are dealt with, and the treatment given to them does not provide for full rehabilitation. The problem of delinquency is extensive because of the prevailing general conditions in which children are brought up. Poverty, neglect, slum life and frustration may lead to acts of delinquency. Case treatment often reveals the delinquency of the parent, experience of cruelty at home, and encouragement of delinquent acts by elders.

43. In some States progressive legislation for dealing with delinquency already exists ; in others, no legislation has yet been enacted. The Ministry of Education has drafted model legislation for the guidance of States. Most of the Children's Acts deal with neglected, dependent and destitute children, difficult, uncontrollable and delinquent children and victimised and exploited children. In some cases the provisions of the Children's Act are in

conflict with Wards and Guardians Acts. All existing legislation and treatment should be reviewed from the standpoint of a more comprehensive approach towards the problem.

44. The weakest link in the treatment of the problem is the absence of one suitable agency for the enforcement of the legislation, the absence of an adequate police force, and inadequacy of court facilities, children's institutions, and probation officers. It is necessary to set up juvenile aid committees in cities, consisting of a small number of selected and specially trained police officials who will examine cases of delinquents, and deal with cases of minor delinquencies without reference to courts. The inadequacy of existing certified schools and fit-persons institutions is well known, and in order to provide the right conditions, a beginning has been made in some States to create children's villages, boys' towns and other institutions with proper conditions of rehabilitation. Pilot projects for this purpose are contemplated in certain States where the incidence of delinquency is high. Institutions like juvenile reformatories exist in the country, and these need to be adapted and re-organised to suit the present objectives. The practice of providing even temporary habitation and shelter to juveniles in correctional institutions where adult under-trials and prisoners live should be discontinued.

45. The general improvement of child welfare services in India requires greater co-ordination and better leadership for the several hundred child welfare organisations that exist in India. The child welfare movement, under the guidance of the Indian Council for Child Welfare needs to be encouraged and strengthened ; and it should be made more representative of children's organisations in the country. There should be a strong national headquarters to carry out the objectives of the movement, and maintain and improve standards of child welfare. It is proposed to create a national centre of child welfare in a central place, with similar organisations in some of the States. The national centre will become the experimental station, training centre, a seat of pilot projects and clearing house for information and material on child welfare.

46. *Children's organisations*—Though comparatively small in size, organisations for children have come into existence in different parts of India for providing recreation for children. The *Balkan-ji-Bari* is a developing organisation and its main value lies in bringing together children from all over India in camps and national festivals. The *Bachon-ki-Biradari* and *Kishore Dal* are similar organisations in the north. Such organisations deserve the support of local self-governing bodies and child welfare agencies. The junior sections of the Boy Scouts and Girl Guides organisations have been long engaged in giving valuable training to children outside the educational institutions. These organisations help to develop children for a fitting role in the youth movement.

FAMILY WELFARE

47. There are a few agencies dealing exclusively with the problems of the family in India, and they cater mainly to local needs. Sectional groups assist their members with small doles and provide help in education, medical assistance and housing accommodation.

Recently, some family welfare agencies have come into existence in Madras, Bombay and other places. The case work method is being used to assist families in rural as well as urban slum areas. This is a small beginning which shows a new approach to family problems. The organisations of extensive community welfare programmes in urban and rural areas creates the possibility of organising family welfare services on a small scale, including especially a family counselling service. As more case-workers become trained in the various schools of social work, it will be possible to undertake a survey of family mal-adjustments and handicaps in selected community areas and to assist families in dealing with their economic and pathological problems.

48. The programme of social education ought to make a valuable contribution towards the promotion of family welfare. There is need to give general information to adults about subjects like family relationships, family planning, marital hygiene, domestic economy, mothercraft and homecraft. This information could be supplemented by a programme of audio-visual aids dealing with all aspects of family life. Family welfare agencies should be able to publish literature giving specific information about the treatment of family problems.

The Central as well as State Governments may assist private organisations, trusts and funds in creating and running institutions or centres for the development of small-scale industries, crafts and handicrafts. Such institutions will provide avenues of employment and training and help families in avoiding destitution or in supplementing small family incomes.

YOUTH WELFARE

49. Youth is the stage in life when, through training and development, immaturity approaches maturity for work, marriage, social participation and cultural attainment. The period of youth should stand for growth, development, preparation, action and leadership. Youth matures quickly in an atmosphere in which there is freedom, activity, recognition and opportunity. The life of youth should not be over-occupied with training and education, but there should be opportunity for self-expression, comradeship, community life, and national service.

50. The youth movement includes two kinds of organisations, namely, those which work for the welfare of youth, and those composed of the youth themselves. In varying degrees, youth organisations are interested in or are influenced by political emphasis. In order that youth organisations should grow and make an effective and continuing contribution to national life, their endeavour should be to give their main attention to activities which would promote youth welfare. Besides, the strength of the national youth movement can only be built up as a result of unity in action and comradeship amongst those who work for youth welfare in any of its aspects.

51. The objectives of the youth movement may be classified to cover two separate aspects of the movement : (1) those that contribute towards self-preparation, personality development, character formation and citizenship ; and (2) those that lead to organised action in

the service of the community and the nation. Youth has with courage opposed conventionalism and unhelpful traditions, but the immediate task before youth in India is to organise and work hard to carry out constructive tasks in the national programme. There is need to co-ordinate the work of all youth organisations into a single powerful youth movement, functioning through a national council of affiliated youth organisations. Such an organisation, whilst permitting its members to work for their own objectives and carry out their programme independently, will work to build up the individual and collective strength of all youth organisations. The national youth movement has to create a national headquarters with young men and women of vision and ability who should be trained youth organisers, aware of the problems of youth, and trained to develop group work, recreational activities and national service programmes which can be quickly canalised into various fields of service. Assistance may be given by the State to the existing youth and other organisations to create and strengthen the youth movement.

52. Special measures are needed to strengthen the scout movement. The Bharat Scouts and Guides organisation had 1,73,902 cubs, 2,65,296 scouts and about 50,000 *bulbuls* and guides on its rolls in 1951. The movement has 21,393 trained and warranted scouters and 3,997 helpers. The scout movement has to play a vital role in serving the younger generation and in organising them for the active service of the country. Not only has the movement to be extended to villages, but the quality of its service has to be developed. For this purpose the national as well as State headquarters have to be strengthened and adequately equipped for creating and training a larger number of scouters and promote efficient guidance and supervision to its units. The scout movement should receive the support of the States, the local self-governing bodies as well as the community. There should also be co-ordination of activities between the scout movement and the other youth and children's organisations. The youth and student organisations should be able to provide an increasing number of scouters who will be required to extend the work of the movement in the near future. The National Cadet Corps is another movement for youth which functions in the universities for the promotion of physical fitness, discipline, character and the general fitness of youth for defence, national service and personal welfare. The membership of the National Cadet Corps is voluntary, but universities and educational authorities should encourage youth to take advantage of this organisation, and membership of the National Cadet Corps should be considered an added qualification for the purpose of employment.

53. Youth needs guidance, advice and help with regard to personality problems, sex difficulties, and situations in home and community life. The organisation of community centres in urban and rural areas will make "youth counselling" possible, provided there are mature persons who are given a brief training on youth problems, and who are willing to undertake counselling on a voluntary basis. It is possible to introduce "youth counselling" as one of the activities in educational institutions as well as in youth organisations and trade unions, and it could also form part of the labour welfare programmes in factories.

54. Opportunity for physical activities, group companionship, arts, hobbies, and contact with Nature can be given through organised programmes of local boys' and girls' clubs, inventors' clubs, young farmers' clubs, hobby clubs, etc. These

do not require large resources, and the younger folk themselves can contribute and find the necessary funds to run their own organisations as independent programmes or as part of community centres or as extra-curricular activities in educational institutions. An important contribution towards the development of youth is made by youth camping and travelling programmes. A beginning has been made in India with a Youth Hostels Association, which is part of an international organisation. The movement needs organisers, and houses with caretakers, which could be used as hostels. University hostels, *dharamshalas*, houses which can be spared, hutments on camp sites, and houses near holiday resorts should be made available to youth travellers with minimum equipment and boarding and lodging facilities at lowest cost. The Government can help the youth movement by allowing special reduced rates on railways, steamships, and State and municipal motor services to members of approved youth organisations. Whenever merit awards are given to youth in universities, and sports, cultural and other organisations, it should be possible to give travel prizes and journey scholarships.

55. *Youth and national service*—Youth have made a vital contribution to the struggle for freedom, and they must be given the opportunity to give their contributions to constructive activities and programmes of economic development and social welfare. Reference has been made in the chapter on 'Education' to the contribution students will be called upon to make towards national service. An amount of Rs. one crore has been provided for a comprehensive programme of youth camps, labour service for students, etc. The programme will have to be worked out in collaboration with universities and other educational institutions as well as youth and student organisations. Youth participation in constructive activities should be based on personal inclination and interests, and youth should be encouraged to become members of organisations that carry out specific activities amongst the people or there could be special youth groups for carrying out specific programmes. It is also possible for educational institutions to organise "service clubs" as one of the extra-curricular activities. The enthusiastic participation of youth is required in programmes and activities for promoting physical fitness and community recreation, social education, child welfare and youth organisation. Youth could also render valuable help to institutes organised to render different types of service to the needy, handicapped and mal-adjusted members of society.

NATIONAL PHYSICAL FITNESS

56. The chapter on Health has dealt with the problems of ill health and disease in India. The subject of national fitness deals with the maintenance and improvement of health of every citizen in order to develop efficiency. In the absence of legislation in the form of a National Fitness Act, it is necessary that physical fitness programmes are promoted by the States, as well as by the community.

It is possible for a nation to attain by organised effort and education certain physical qualities, abilities and skills so as to be able to perform the normal functions of life, be prepared for the protection of home and nation in times of external aggression and

danger, and contribute towards national efficiency for economic production. A physical fitness standard for the individual should include the three factors of agility, strength and endurance which are the basis of all physical qualities and skills. In order to achieve the above, a national standard of physical achievement for all adults has to be laid down.

57. In a country like India, with numerous climatic, regional and racial differences, a universally applicable national standard may be difficult to attain and allowance will have to be made for sex differences, the racial factor, types of physical region, climatic conditions, standard and content of nutrition, and prevailing averages of height and weight for specific racial groups. The standards to be achieved may be laid down by a committee of health and education experts and other social scientists after consulting authorities and ascertaining conditions in different parts of the country. It is possible for every individual to strive to attain this standard individually ; but the State, educational authorities and private social welfare and especially physical welfare agencies should attempt to provide facilities and opportunities to assist the individual to attain this standard. The community project authorities, the Bharat Sewak Samaj, all sports and play-ground organisations and universities should aim at reaching the proposed national standards.

58. The maintenance and promotion of national physical fitness requires the proper management of housing and sanitation, the care of diet, the need for relaxation and rest, the promotion of play-ground, sports, physical culture and camping movements, execution of intensive programmes of child welfare, the protection of the health of working men and women, and the adoption of preventive measures against diseases and psychological disorders like neurosis.

59. Play-ground programmes are naturally spread over in different areas. Regional co-ordination of all agencies and activities will promote the growth of leadership, the training of personnel, and the development as well as the economic use of resources. National organisations for physical education, sports, recreations, etc., should be strengthened, so that they can guide and assist the building up of play-ground activities, athletics, community recreation and yogic exercises. As play-ground activities are to be developed through community programmes, and as youth activities are also to be promoted extensively, there will be increasing demand for leadership in these fields. It is suggested that one of the existing training institutes for physical education should be converted into a national institute.

60. As national fitness programmes involve activities for large numbers of persons, the problem of resources becomes the greatest handicap in the promotion of the movement. It is imperative that some kind of play-ground should be available for the use of every community centre, school and youth organisation. Equipment is also needed for physical fitness programmes. When developing play-ground programmes, it is necessary to keep in view the

four important objectives of recreation, education, leadership training, and social participation. India has yet to make much headway in the field of sports and steady support and encouragement are needed.

61. India has a rich gamelore with a variety of games adapted to age and sex groups and to local physical conditions and cultural patterns. There is a need to survey play activities in different areas, prepare a manual of instructions for specially selected games, and enrich the gamelore of the whole country by organised publicity through documentary films demonstrating each game. Indian gymnastic programmes have considerable appeal in urban as well as rural areas. Community programmes should help the revival and extension of such activities in every part of the country.

CRIME AND CORRECTIONAL ADMINISTRATION

62. Research in the problem of crime in India has not yet made sufficient advance. The immediate task is to change or modify existing policies and programmes in order to adjust them to new objectives which seek to protect the interest of society and achieve a total rehabilitation of the offender. Crime is stimulated by conditions prevailing in society and it is due to personal and psychological factors. Economic conditions have always been a factor contributing to crime. Intensive surveys to study the causes, nature and extent of crime should be undertaken by research organisations, universities and other private agencies. The treatment of the crime problem is intimately related to the nature of legislation, and the approach of the judiciary to crime. So far there has been no basic approach towards the various problems of correctional administration, but a number of useful steps have been recently taken by States and there is a growing interest in the reform of penal administration.

63. The problem of correctional administration has to be dealt with in three stages: the pre-committal stage ; the administration of correctional institutions ; and probation and after-care. The principle that no person should be considered an offender till he is proved guilty should govern the treatment of accused and under-trial persons. The administration of police lock-ups and jails needs to be reviewed in the interest of the proper treatment of the inmates of the lock-ups. Special care must be taken when first offenders are committed to jails, so that no serious psychological harm is done to them. The administration of correctional institutions is governed by jail manuals. A recent conference of State Inspectors-General of Prisons has proposed the appointment of a committee to suggest the basis on which jail manuals may be revised to suit the new objectives, methods and programmes of correctional institutions, remove the inflexibility of rules, and permit greater freedom to the authorities on the spot to interpret sympathetically the rules so as to serve the objects of rehabilitation. Changes in the jail manuals will naturally require a revision of the Prison and Prisoners' Act which would need to be modified to meet changes in correctional administration.

64. The need to utilise prisons as agencies for the rehabilitation of prisoners is generally accepted. Modern principles of penology require that each prisoner is to be dealt with as an individual, and corrective handling should be so devised as to be in consonance with his abilities, aptitudes, back-ground and also with the paramount purpose of enabling him to earn his living honestly as a law-abiding member of society. While this must be the ideal

and all plans must be directed to this end, the possibility of utilising the manpower resources represented by prisoners on projects of socially constructive character should be fully explored. Central prisons and district jails should receive the assistance of Departments such as those concerned with industries, agriculture and irrigation, so that the maximum advantage can be taken of the labour available in correctional institutions. A probation and after-care service is likely to minimise the cost of maintenance, as prisoners will not be called upon to serve long sentences during which they will be maintained by State Governments. As life in prison has to be organised so that the inmates live as a community and as the method of case work is to be increasingly used to deal with individual cases in correctional institutions, welfare officers should be progressively employed in central prisons and first grade district jails. Officials of correctional institutions should be given special training both before employment and during service.

65. Prisons and jails may need to be reconditioned so as to provide arrangements to suit different classes of prisoners. Separate correctional institutions may be provided for female convicts. It should also be possible to develop open and close farm workshop prisons, agricultural colonies, and work camps at important work projects. The provision for Borstals, both open and closed, will also need to be expanded. It will be necessary to bring about greater uniformity in legislation applicable to first offenders and others charged more than once for minor offences. The appointment of probation officers and the release of prisoners on parole should remove a great deal of congestion from correctional institutions, reduce the cost of prison administration, and enable many prisoners to live as normal citizens after they have served their sentences. The work of private agencies like prisoners' aid societies and district probation and after-care associations has suffered on account of limited resources. It is desirable to entrust after-care work to probation officers, and a beginning may be made by organising after-care departments in central prisons and first grade district jails to deal with problems relating to work and employment, housing, health and family relationship. New developments in the administration and programmes of correctional institutions require the guidance and advice of experienced personnel working together in a central organisation. Such an organisation can assist programmes in the States, undertake experimental work and pilot projects, and function as a centre of information and publicity on all matters relating to correctional administration. Recognising the need for such a central organisation, the recent conference of Inspectors-General of Prisons recommended that a national bureau of correctional institutions may be established in the Ministry of Home Affairs.

WELFARE OF THE PHYSICALLY HANDICAPPED

66. The physically handicapped person, if he is not able to receive medical attention, or when such attention is found to be of no avail, has to depend upon his family for maintenance and shelter. Absence of family support leads to beggary, or dependence upon public charity. Inadequate medical treatment, absence of vocational training, and lack of opportunities for social adjustment of the persons to the environment has contributed to the sufferings of a large number of persons who ought to receive the intelligent assistance of the community, and if possible an effective assistance from the State. Physically handicapped persons are classified as (1) those lacking in one or more physical senses, *i.e.*, blindness and deafness, or

combinations ; (2) those suffering from movement difficulties ; *i.e.*, orthopedic, malnutrities and cardiacs ; and (3) lepers, epileptics, rachitics, and dumb persons. The total number of afflicted persons in India has hardly ever been correctly estimated. This is due to defective enumeration, lack of definitions, and the desire of persons to avoid publicity to their handicaps. To obtain better estimates of afflicted persons, sample surveys in selected urban and rural areas are needed. Some provision for physically handicapped persons exists in several States. Voluntary associations which are already working the welfare programmes for this class of persons need to be encouraged and assisted.

COMMUNITY APPROACH IN SOCIAL WELFARE

67. The field of social welfare will expand in the measure in which local communities accept responsibility for solving their own problems. The State has undoubtedly a vital role to play and, as its functions develop, an increasing field of social work becomes linked in one way or the other with programmes initiated or supported on behalf of the State. Community welfare programmes embody four inter-linked ideas, namely (1) self-help and mutual service, (2) maximum use and development of local resources through organised community life, (3) economic betterment and cultural development through social participation in co-operative effort, and (4) achievement of community objectives through the minimum amount of assistance from the State.

68. These ideas are applied in different fields of social welfare. According to its circumstances and problems and its size and resources, each community sets before itself its principal objectives and organises the effort for their achievement. The community approach finds perhaps its most striking sphere of action in the community development programme included in the Five Year Plan. This programme is mainly rural at present but in some States it has a large urban component as well. The rural community development programme has already been described in an earlier chapter. The programme concentrates on certain strategic features of village life, but has within it the element of growth, so that its essential aim is to transform not only the technical environment in the village, but also the social and economic relations and attitudes within the village community. There is no section of the community which stands outside the influence of the programme.

69. Community programmes hold high promise in urban areas as well. Cities and towns have to be divided into manageable units and the more backward areas, in particular, the slum areas, selected for intensive social work. Urban life tends to shift the emphasis from the community to the individual with all the consequences that this implies. There is, therefore, considerable need to establish community centres which will foster a sense of community responsibility, civic pride and a feeling that the interests and welfare of individual members are realised best through community action. Through community centres established in the main through their own effort, local urban groups can survey their own urgent social and economic needs and seek solutions through co-operative effort. Innumerable problems, touching upon every aspect of the life of the community and more especially affecting its weaker members, at present remain neglected and unattended. Organised community action on the part of local urban groups in the cultural field no less than in solving common problems can make a vital contribution towards raising the level and enriching the content of urban life.

CHAPTER XXXVII

WELFARE OF BACKWARD CLASSES

SCHEDULED CASTES AND OTHER BACKWARD CLASSES

THE EVOLUTION of the social structure during centuries of feudalism in regions which were not then developed by communications led to the existence of large communities which suffered handicaps and disabilities imposed by other economically and culturally dominant groups. The chief amongst the underprivileged or specially handicapped groups are the Harijans, *i.e.*, the scheduled castes, the tribal population, groups which were hitherto known as criminal tribes, and other groups who can be considered to constitute the weaker section of the population and who are socially, economically, and educationally backward.

2. The term 'backward class' is difficult to define. Backwardness is expressed in lack of adequate opportunity for group and individual self-development, especially in economic life and in matters of health, housing and education. It is measured in terms of low levels of income, the extent of illiteracy, and the low standard of life demonstrated by living conditions.

3. The present population of the 779 scheduled castes in India is 498·37 lakhs*. This figure does not include backward groups which are not mentioned in the schedule. Such groups are known as "other backward classes" and their population, according to the Ministry of Education Scholarship Board, was 546 lakhs in 1951. Article 340 of the Constitution has empowered the President to appoint a Commission to determine the conditions of backward groups not included in the schedule of castes who could be considered to be socially, economically and educationally backward. This Commission, known as the Backward Class Commission, will shortly be appointed, and one of its functions will be to prepare a schedule of other backward classes for the approval of the President.

4. The country has now passed the stage of discussing the problem of the origin or sanctity of the institution of untouchability. That the stigma of untouchability should be totally and unreservedly eradicated has now been accepted by the whole country. According to Article 17 of Part III of the Constitution "untouchability is abolished and its practice in any form is forbidden". But untouchability, being an age-old institution, has taken roots in the psychology and social structure of certain communities. Its eradication is incomplete so long as it receives a mental recognition and persists indirectly in some form in the social structure. A fourfold programme is, therefore, necessary, *viz.*, (1) removal of untouchability by law; (2) removal by persuasive and educative processes through social education; (3) the practice of democratic behaviour in social and recreational life; and (4) opportunities afforded

*The Scholarship Board of the Ministry of Education has shown the population of Scheduled Castes as 517 lakhs in 1951.

by the State and private agencies for self-development and expression and for the betterment of health, education, economic life, and living conditions. Improved living conditions, education, and participation in a society with extensive economic interdependence and facilities for communication, movement, and contact, will in due course of time lead to a total integration of these groups with the rest of the country.

5. Welfare services for scheduled castes are included in the special programme for the welfare of the backward classes. Education is the most urgent need of these communities, and extensive measures for increasing educational facilities have been taken by the State. In some of the Part A and B States these concessions extend right up to the university stage. Emphasis is placed in almost all cases on vocational or technical training. The concessions usually take the form of free tuition, stipends, scholarships, provision of books, stationery and other equipment. In certain cases the aid extends to clothing and mid-day meals. The opening of primary schools in areas where scheduled castes live in large numbers and the running of hostels for their benefit in district towns and educational centres are the other two usual activities. For vocational training there are peripatetic parties of instructors in Bombay and West Bengal and also the established technical and vocational training centres of the *Bakshi-ke-Talab* in Uttar Pradesh. The trainees, who are almost always stipend holders, also receive loans and subsidies to enable them to settle down in their respective trades. A total amount of about Rs. 3 crores has been provided in the Five Year Plan of the State Governments for the education of the 'backward classes'.

6. For those residing in rural areas there is a provision for the allotment of waste land. This is usually accompanied by the grant of a taccavi loan for the purchase of agricultural implements and bullocks.

7. A certain percentage of Government positions are reserved for all scheduled caste candidates, and in almost all these cases the standards of age, qualifications or experience are also relaxed. A minimum number of vacancies are reserved for them ; there is, however, no bar to their recruitment and employment in larger numbers.

8. The State Governments have provided a sum of Rs. 10 crores for the benefit of scheduled castes during the period of the Plan. The Central Government have also provided a further sum of rupees four crores for expenditure during the remaining period of the Plan. The general aim is to follow intensive programmes rather than to dissipate the limited resources on loosely conducted activities over a wide area. Provision is made for the more liberal disbursement of money under different heads to institutions working in this field, and an effort is being made to improve efficiency by channelling expenditure through effective and well-supervised organisations. Since most of the Harijans live in isolated colonies, they offer good scope for the organisation of community centres. Measures for achieving the welfare of the scheduled castes are circumscribed by the amount of available resources. The pace of improvement is, however, being accelerated, and still more progress is expected as larger resources are devoted to this work.

9. The chief voluntary agency for the welfare of Harijans is the Harijan Sevak Sangh. It has 35 State branches and 325 district committees. Its activities are directed towards the all-sided welfare of Harijan communities.

THE SCHEDULED TRIBES

10. The tribal population in India is accepted to be the oldest population of the land. The communities have lived for centuries in the forest and hilly regions, and at present they are found in a wide central belt beginning with the Aravalli Hills in the West and extending into parts of Bombay State, Madhya Pradesh, Bihar, Orissa, West Bengal and Assam. There are tribes in the north in the southern ranges of the Himalayas, and also in the south in the western Ghats and eastern Ghats and in the Vindhya and Satpura mountains.

11. The schedule of the tribes entitled to the special rights conferred on scheduled tribes by the Constitution was issued by the President in March 1950. The population of the 245 tribes included in this schedule was in 1950 178·75 lakhs, which is about 5 per cent of the entire population.

12. Heretofore the problems of the tribal people have been approached from different angles according to the interests of the persons dealing with them. Amongst these have been anthropologists, administrators, missionaries, social workers and politicians. There developed one school of thought which held that the tribal population should be permitted to live in isolation from other more organised groups, without even the interference of the political administration. There may be a good deal of justification for such a policy of non-interference; but it is not easily practicable when tribal life has been influenced by social forces from without, and tribal communities have reached a certain degree of acculturation accompanied by the penetration of communications into the tribal areas and of social services for the betterment of their lives.

13. The conditions are now generally such that there has to be a positive policy of assisting the tribal people to develop their natural resources and to evolve a productive economic life wherein they will enjoy the fruits of their labour and will not be exploited by more organised economic forces from outside. So far as their religious and social life is concerned, it is not desirable to bring about changes except at the initiative of the tribal people themselves and with their willing consent. It is accepted that there are many healthy features of tribal life, which should be not only retained but developed. The qualities of their dialects, and the rich content of their arts and crafts also need to be appreciated and preserved.

**Note.*—The percentage of the tribal population to the total population in the different States (after partition and merger) is as follows :—

Part A States : Assam—33·9, Bihar—14·1, Bombay—9·2, Madhya Pradesh—22·6, Madras—1·1, Orissa—25·4, Punjab—Nil, Uttar Pradesh—0·5, West Bengal—6·5.

Part B States : Hyderabad—4·1, Jammu and Kashmir—0·7, Madhya Bharat—15·4, Mysore—0·1, Pepsu—Nil, Rajasthan—11·7, Saurashtra—0·06, Travancore-Cochin—1·8.

Part C States : Ajmer—15·6, Bhopal—9·0, Coorg—11·6, Delhi—Nil, Himachal Pradesh—Nil, Kutch—0·3, Manipur—29·8, Tripura—6·4, Vindhya Pradesh—5·9

14. Article 275 of the Constitution requires that a special financial grant should be provided for programmes for the social and economic welfare of the tribal population living in scheduled areas. Under this Article the Central Government have made a provision of Rs. 12 crores for the period of the Plan, but detailed schemes have not yet been fully worked out. The various States have provided another Rs. 11 crores for the development of tribal areas. Their programmes include schemes for the building of roads, the improvement of water supply, the provision of irrigation, the development of agriculture, animal husbandry and cottage industries, and for increased educational and medical facilities.

15. The North East Frontier Agency is populated by a large section of the tribal population and their economic and cultural development has to be brought in line with the progress made in the rest of the country. A sum of Rs. 3 crores has been provided for the physical, economic and social development of this area and its tribal inhabitants and a Five Year Plan has been drawn up.

DEVELOPMENT OF THE ECONOMIC LIFE OF SCHEDULED TRIBES

16. *Communications*—The problems of different tribes may vary in different regions ; but priority has to be given to the maximum development of their economic life. Most of the tribal areas have been neglected so far as roads and communications are concerned. The importance of communications has now been recognised and a sum of over Rs. 2 crores is provided in the State Plans for developing the roads in the tribal areas. This amount is separate from the road grants available from the Central and the State Governments. Great care has to be taken however to see that communications are not prematurely developed so as to permit economic exploitation by outside and more advanced communities.

17. *Water supply*—Tribal areas are mostly hilly and rocky and, therefore, there is a considerable shortage of water. In areas which are covered by thick jungles, the water becomes at times unfit for drinking and for cultivation owing to the accumulation of decayed leaves. Special efforts are therefore being directed towards the construction of wells and the improvement of irrigation facilities.

18. *Forest economy*—Tribal economy in the past was able to develop or exploit the physical region without control or hindrance. Later on, there was in many parts of the country an intensive and yet unsystematic exploitation of the physical region inhabited by the tribes, with very little consideration for their economic welfare. It is desirable that tribal communities should be made the primary agents for the care and development of the forests and the exploitation of forest resources. Forest schools should be started to bring the young tribals up to love, care for, and work systematically for the enrichment of the forests which will mean in turn the betterment of their own lives.

19. *Agriculture*—The nature of agricultural development in tribal regions will vary according to the prevailing agricultural practices, the type of soil, and the forces that promote agricultural initiative. Though adequate facts and statistics are not available, land in the

tribal areas consists generally of poor, rocky and barren soils on which in most cases only coarse cereals, pulses and roots are cultivated. The problem of land ownership has become increasingly difficult during the last few decades. Many tribal groups became landowning communities, but in times of famine and economic difficulty, their lands passed to absentee landlords. The problem of land restoration and distribution is linked up with the larger problem of land reform affecting all agriculturists, but the tribal population could be induced and assisted to move to large uncultivated areas which are suited to their modes of living.

20. The tribal communities in hilly regions have long been accustomed to the system of shifting cultivation. Though in parts of the country they have already adopted more settled methods of agriculture and have taken to terrace cultivation using the normal village implements, there are areas where the system of shifting cultivation still prevails. The introduction of improved methods of agriculture has to be attempted after a study of local conditions and with due regard for the level of understanding of the tribal communities concerned.

21. People in the tribal areas are illiterate, but in spite of this and the many other difficulties in the way of the co-operative movement, a large number of co-operatives worked by social workers on behalf of the tribals have come into existence in several States. Co-operative activities should be developed in a planned manner throughout the tribal areas so that their benefits may not only be reaped by the cultivator but also by other sections of the people. Various States have created new organisations to help the agriculturists in the tribal areas. The Grain Banks or Beej Kosh in Bombay, the Grain Golas in Bihar and other States help the people with seeds and with the storage of crops so as to build up food resources, and also give guidance for the improvement of agriculture.

22. The community development projects will now be able to accelerate the speed of agricultural development in the tribal areas. The following areas which have been selected for community development include tribal communities :

Assam (Cachar District)	. . . . .	One development block.
(Darrang District)	. . . . .	One development block.
(Tribal Areas in Assam)	. . . . .	Two development blocks.
Bihar (Santal Pargana District)	. . . . .	One development block.
Orissa (Kala Handi District)	. . . . .	One development block.
Madhya Pradesh (Bastar District)	. . . . .	One development block.
Tripura (Nutan Haveli)	. . . . .	One development block.

23. *Arts and Crafts*—Tribal communities are invariably accustomed to more than one type of economic activity. Their free life, initiative, dexterity and desire for basic goods for domestic, religious and social life lead them to exploit the resources of their environment, and thus they are the creators of a large number of interesting crafts, which are practised not so much to supplement their income as to supply them with some of the necessities of life.

They are not, however, yet fully conscious of the richness of their environments and they require to be helped to exploit commercially the clay, stone, animal, bird, insect and plant life of the forests, using their skills in organised co-operatives and exporting their products to the markets of the land.

24. The physical environment stimulates arts and skills which are peculiar to the culture of each tribal community. Their principal form of artistic expression is dancing which has become the inspiration of professional dancers in rural and urban areas. The cultural life of the tribes should not be interfered with ; on the contrary they should be given encouragement and opportunity to develop their tribal cultures.

25. *Health and hygiene*—The deficiency of health services in the rural areas is well known, and the tribal areas, which are lacking in communications and where the population is scattered over vast distances, have hardly been provided with any medical assistance up till now. Some of the diseases prevalent in tribal areas are malaria, yaws, scabies, venereal diseases, small-pox, leprosy, tuberculosis, trachoma, glaucoma, and elephantiasis. Unhygienic conditions, malnutrition, bad water, lack of protection against the climate, and in some cases harmful social customs and practices are among the causes of the widespread prevalence of disease.

26. Throughout most of the tribal areas the belief in 'possession' and in the demoniacal causation of disease still prevails. But a patient programme of health education, with the assistance of mobile dispensaries, and the gradual introduction of regular medical services will introduce to the people the advantages of scientific methods in dealing with problems of health and disease.

27. There is a need for comprehensive health surveys in selected areas covering diet, beliefs and health practices, the etiology, prognosis and incidence of various diseases, and herbal medicines and other tribal ways of healing. It may be advantageous to develop such of the medicines and healing practices as are found to have some scientific basis or therapeutic value.

28. *Education*—Article 46 of the Constitution requires that special attention should be given to the education of the children of scheduled tribes. It will, however, have to be conceded that the usual formal system of education is not likely to prove suitable to the tribal communities. It is desirable that the Commissioner of Scheduled Castes and Scheduled Tribes and the Department of Scheduled Castes and Tribes in the various States should deal with the problem of the education of tribal children for some time before the Departments of Education take over the management of institutions in tribal areas. Students in tribal areas will receive a primary-*cum*-basic education for eight years and basic education will receive the main attention of the Department of Scheduled Castes and Tribes during the next five years. The programme of basic schools will have to be adjusted to the needs of forest, pastoral and agricultural communities of a very simple type.

29. The problem of which language should be the medium of instruction in tribal areas has already received consideration not only in the Planning Commission, but by the various agencies which are working for tribal welfare. It is generally accepted that the medium of

instruction in the basic schools should be the mother tongue of the child. The regional language will be introduced at the beginning of the upper primary level, and this will be the State language.

30. State programmes of tribal education include the creation of residential education *ashrams*, vocational and technical training schools, and hostels for tribal students.

31. *Leadership and personnel*—It is desirable that there should be provision for special courses on tribal welfare, including field work experience, in the training institute of the Indian Administrative Service, as well as in such schools of social work as can afford it. There is also a need to train community organisers and other types of social workers from amongst the educated youth of the tribal communities.

CRIMINAL TRIBES

32. The criminal tribes are made up of a few pastoral communities which could not adjust themselves to the economy of settled life ; small sections of forest tribes which broke away from larger tribes because they could not adjust themselves to economies resulting from the forest and land policies of successive governments; and certain groups which were temperamentally and psychologically unable to adjust themselves to a law-and-order society and found it profitable to take advantage of concentrated properties in settled economies rather than to earn their livelihood by productive labour.

33. These nomadic communities preferred to continue their nomadic habits in urban areas where they would not find themselves bound by the need of working on land or by the laws governing the possession of land. Many of them developed peculiar concepts of property and practised anti-social activities. But not all the persons in these communities were criminal and unwilling to adopt normal vocations and occupations. Many members of these communities have shown an inclination to become small traders and shopkeepers, and they possess skills which can be used to develop various crafts. With some persuasion they can, if given aid, become agriculturists.

34. On the whole most of these communities have now settled down and only small sections of them follow their old predatory habits. There may be some groups who sometimes take to anti-social activities due to economic conditions or the opportunities offered by their environment. Certain groups still prefer to move from place to place, improvising shelter and finding ways of living without having to settle down in any particular area. The last estimate of persons belonging to criminal tribes gave their number as 2,268,348 and there were 198 tribes enumerated as "criminal".

35. The Indian Constitution has accepted the principle that no man can be considered guilty unless he is proved to be so in a court of law. Accordingly the Criminal Tribes Acts have been repealed and with effect from 30th August 1952 have ceased to be in force in any of the States. With the repeal of these Acts the problem of the criminal tribes has to be

dealt with according to new programmes and policies. The original objective was to safeguard the interest of the larger society, and this was done without much consideration for basic principles of jurisprudence. Even if criminality was a fact, adequate efforts were not made to rehabilitate the individual and the group and to adjust the community economically to the environment. The new policy will be to treat all such communities as backward classes. Special efforts will be made by the States to rehabilitate the communities economically. Individual acts of criminality will be dealt with according to the ordinary law.

36. There are two major solutions to the problem of such groups. The first is to achieve their economic rehabilitation ; and the second is to apply to the children of these communities a well thought out scheme of education which will gradually wean them from their present practices. The members of these communities possess vitality, energy, resourcefulness and skill. Rather than paying attention to their known evil habits and weaknesses, it should be possible to concentrate on the positive qualities disposing them to engage themselves in creative activities in which there is the element of adventure, romance and achievement. It has been difficult to find economic opportunities for them outside the ordinary spheres of agriculture and handicrafts, but certain selected crafts have been found capable of engaging their interest and skill. The experiment should be made of settling these communities in new areas which need to be developed, and where they will be put under leadership which is able to understand their temperament and problems. A suitable method of dealing with criminal tribes settlements, wherever they exist, would be to convert them into Community Centres under a trained Community Director.

37. It is likely that some members of groups previously styled criminal tribes may still prove to be uncontrollable and be responsible for anti-social acts. In such circumstances the Probation of Habitual Offenders Act should be applied to them in selected areas. Under its provisions it should be possible to intern them within their homes and to release them on licence after a defined period not exceeding three years or help them to settle peacefully in an area and occupations suitable to them.

CHAPTER XXXVIII

REHABILITATION OF DISPLACED PERSONS

WITHIN A few months of the Partition of the country in August, 1947 nearly 5 million Hindus and Sikhs living in West Pakistan had to leave their homes. Under somewhat different conditions 1·5 million displaced persons migrated from East Pakistan. The disturbances in East Pakistan early in 1950 brought another million or so. According to the 1951 Census, about 7·5 million persons had moved into India in search of permanent homes, 4·9 million from West Pakistan and about 2·6 million lakhs from East Pakistan.

2. The displaced persons from West Pakistan are dispersed over the Punjab, PEPSU, Delhi, Uttar Pradesh, Saurashtra, Bombay, Madhya Pradesh, Madhya Bharat, Ajmer, Bhopal and Rajasthan. They are more or less evenly divided as between urban and rural avocations.

3. Although 2·6 million Hindus had moved into India from East Pakistan by the beginning of 1951, there are still seven or eight million Hindus living there. The influx continues; sometimes it slows down and sometimes, as during recent months, it assumes serious proportions. There are at present over 2·1 million displaced persons in West Bengal and of them, 1·4 million are in Calcutta and the two neighbouring districts of Nadia and 24-Parganas. The economy of West Bengal has thus been subjected to very serious strain. It is estimated that 92 per cent. or about 2·4 million of these displaced persons derived their livelihood from agriculture or ancillary occupations.

RURAL REHABILITATION

4. In some States of India, namely the Punjab, PEPSU, Rajasthan and Delhi, large areas of agricultural land were left vacant by the Muslim evacuees. The Government of India utilised these lands and explored other avenues for rural rehabilitation of displaced persons from West Pakistan. Three distinct policies were followed :—

- (i) quasi-permanent allotment of evacuee agricultural land in the Punjab and PEPSU;
- (ii) allotment of evacuee agricultural land on a temporary basis in other parts of India, especially the States of Delhi and Rajasthan;
- (iii) settlement of culturable waste lands reclaimed by the various State Governments or the Central Tractor Organisation.

The first policy constituted the single largest measure of rehabilitation and was carried out in respect of displaced land-owners from West Punjab and of Punjabi extraction from other parts of West Pakistan. These persons had left behind 6·7 million acres, whereas the area abandoned by Muslim evacuees in the Punjab and PEPSU was 4·7 million acres, or in

terms of 'standard acres' (into which differences in qualities of land and differences of rights were reduced) 3.9 and 2.4 million respectively. This gap of nearly 1.5 million 'standard acres' was made up by applying graded cuts on a slab system. A cut of 25 per cent. was imposed on holdings upto 10 acres. Higher cuts were applied to the larger holdings and the highest cut was at the rate of 95 per cent. in the case of holdings over 1,000 acres. An owner of 10 'standard' acres received an allotment of $7\frac{1}{2}$ acres, of 100 acres $51\frac{1}{2}$ acres, of 500 acres $126\frac{1}{2}$ acres, of 1000 acres $176\frac{1}{2}$ acres and of 5000 acres $376\frac{1}{2}$ acres. The allotment was on a quasi-permanent basis. In all, 2.4 million 'standard acres' were allotted to about half a million families. About 93 per cent. of the allotted area has been taken possession of by the allottees. The allotments of those who failed to take possession of their lands were cancelled and the lands so vacated were reallocated to displaced persons whose claims had not been met so far.

5. In addition to displaced persons who received quasi-permanent allotments of land, there were about 76,000 agriculturist families who had either been working as tenants of Muslim evacuees or had been settled temporarily on evacuee land immediately after the Partition although they had left no land as owners in West Pakistan. Over 33,000 of them have already been satisfactorily settled as tenants-at-will and through new tenancy legislation and otherwise the Punjab and PEPSU Governments have taken it upon themselves to see that the remaining tenant families are also absorbed within the rural economy.

6. The second and third policies were confined primarily to displaced agriculturists from West Pakistan who had lands outside West Punjab or were not of Punjabi origin. The area allotted to a family depended on its size. From 10 to 15 acres were allotted to each family in Alwar and Bharatpur, 16 to 24 acres of irrigated land and 16 to 32 acres of unirrigated land in Bikaner, 5 to 10 acres in Delhi and 10 acres in the Ganga Khadar and the Naini Tal Tarai areas of Uttar Pradesh. In all, 57,500 families have been settled on 7.4 lakh acres. Of them as many as 44,000 families have been settled in Rajasthan alone, especially in the districts of Alwar, Bharatpur and Shri Ganganagar in Bikaner, all of which now form part of Rajasthan.

7. Early in 1951, allotments of land were offered to 12,645 families of non-Punjabi displaced agriculturists. Of these only about 4,000 families actually moved to the land. It would appear that many of the families for whom allotments were proposed had found some means of livelihood in areas in which they were residing and were consequently unwilling to resettle on unirrigated land.

8. The vast majority of displaced agriculturists from West Pakistan may, therefore, be regarded as having been resettled. Upto the end of the year 1951-52, about Rs. 8 crores had been given as loans for the purchase of bullocks, fodder, seeds and other agricultural equipment, repair and construction of houses and wells, etc., and for the maintenance of families for the initial period of six months following allotment of land.

9. In respect of displaced persons from East Pakistan, it is estimated that about 330,000 out of 470,000 rural families have already been settled in the Eastern States on land and in occupations ancillary to agriculture. They have been so far given financial assistance exceeding

Rs. 8 crores. It is proposed to settle 50,000 families during 1952-53 and 25,000 during 1953-54 in rural areas at a further expenditure of Rs. 10·10 crores. But for the recent influx, the rural resettlement of displaced persons from East Pakistan would have been practically completed by the end of 1953-54.

URBAN RESETTLEMENT

10. The problem of urban resettlement has been one of great complexity, chiefly because of the essential differences in the economic pattern of the incoming and outgoing population. This difference has been the more marked in the case of displaced persons from West Pakistan. While the Muslim migrant from the Punjab, PEPSU, Delhi, etc., was often a labourer or an artisan, with a comparatively low standard of life, the incoming non-Muslim was frequently an industrialist, a businessman, a petty shopkeeper or one belonging to the white-collar professions and used to much better conditions of living. Secondly, as the urban economy in India, as in any other under-developed country, does not offer scope for quick expansion, the absorption of new elements on any scale presents considerable difficulty.

11. Accommodation was needed in urban areas for about 2·5 million displaced persons from West Pakistan. The Government embarked upon an extensive building programme and upto March, 1952, 150,000 houses and tenements had been built at a cost of Rs. 38 crores. It is proposed to build another 50,000 houses at a cost of about Rs. 21 crores in the course of the next two years. This programme, when completed, will have provided accommodation for about a million displaced persons. About 1·5 million persons have already found accommodation in evacuee houses. Thus, making allowances for those families who have been able to make their own arrangements or who may do so in future, it may be said that the housing problem of the displaced persons from West Pakistan will have been substantially solved by the end of 1953-54.

12. While building activity on private account was promoted by granting building sites and building loans to displaced persons and cooperative societies who could find a part of the finance themselves, the bulk of the programme in the Western Zone has been undertaken departmentally by Government or through special agencies, such as the Faridabad, Rajpura and Hastinapur Development Boards and the Sindhu Resettlement Corporation. Most of the new housing colonies are in the form of suburban extensions of existing cities and towns and have been provided with urban amenities. In addition, 10 new townships have been planned and much progress has been made in their development. They are Faridabad, Nilokheri and Chandigarh in the Punjab, Rajpura and Tripuri in PEPSU, Sardarnagar and Ulhasnagar in Bombay, Gandhidham in Kutch and Govindpuri and Hastinapur in Uttar Pradesh. The construction of these towns is expected to be completed in the main by 1953-54. Together, they are likely to provide accommodation and gainful occupation to over 400,000 persons. The experiments at Nilokheri and Faridabad are significant in themselves. They are based on the principle of self-help on a cooperative basis. If successful, they will be a stepping stone for further planning and development on a national scale.

13. It is expected that no additional construction will be necessary for displaced persons from West Pakistan after 1953-54, but a sum of Rs. 4 crores will be required for completing the development schemes in hand and paying compensation for lands and barracks acquired for housing colonies or new townships.

14. In the Eastern States, on the other hand, emphasis was laid right from the beginning on private initiative and displaced persons were given developed plots and urban loans on a fairly large scale. The Government undertook only a limited building programme. However, up to the end of 1951-52, about 9,000 houses and tenements were built by the State Governments of West Bengal, Assam, Bihar and Orissa and two new townships have been established at Fulia and Habra Baigachi. As conditions in the Eastern States are still fluid it is difficult to estimate the total number of persons for whom housing will eventually have to be provided. Nevertheless, it is proposed to build 95,000 units, in the next two years, 25 per cent of which will be built directly by the Government and the rest by displaced persons with assistance from the Government. Uptil the end of March, 1952, the total financial outlay by the Government on housing in the Eastern States was Rs. 8.8 crores.

15. Gainful employment of displaced persons has been largely achieved by providing service under the Government and imparting technical and vocational training to those fit for it, by allotment and construction of business premises and industrial undertakings, by grant of loans for small as well as large-scale businesses and by grant of financial assistance for school and college education covering arts, science and technical courses.

(i) *Employment*—Up to the middle of 1952, the employment exchanges found employment for 1,63,000 displaced persons from West Pakistan and 31,000 from East Pakistan. In addition, the Ministry of Home Affairs set up a special Transfer Bureau for the same purpose and the Ministry of Railways also reserved 15,000 vacancies for displaced persons. It is estimated that over 80,000 persons thus received employment, although some of them had been sponsored by the employment exchanges as well and might have been shown in their returns also.

(ii) *Technical and vocational training*—A large proportion of displaced persons from towns had been occupied in distributive trades before migration and, therefore, it was felt necessary to train the younger generation among them for productive work. For that purpose arrangements were made to impart to them training in suitable vocations and crafts. The Rehabilitation Ministers' Conference in December 1950, recommended that 80,000 displaced persons should be trained. That target is being gradually achieved. By the end of March, 1952, about 52,000 persons had completed their training and 12,000 more are expected to be trained during the current financial year. It has not been possible to fix a similar target for displaced persons from East Pakistan because of the uncertainty of the situation. However, until the end of March, 1952, 8,000 displaced persons had been trained and it is hoped that 12,000 more will be trained during 1952-53. Targets for subsequent years have not yet been determined.

- (iii) *Education*—Steps have been taken to extend the educational facilities in the country by opening new schools and colleges and increasing the capacity of existing institutions. Under the new policy introduced in July 1951, freeship concessions have been extended up to the high school standard and cash grants for books and stationery are given to deserving students. Stipends are also given to good students in colleges for training in arts, science and technical courses.

On vocational and technical training and on education of displaced persons from West Pakistan Rs. 7.39 crores had been spent up to the end of March, 1952, and a further expenditure of Rs. 2.55 crores is proposed during 1952-53 and of Rs. 1.9 crores during 1953-54. The corresponding figures for displaced persons from East Pakistan are Rs. 4.05, 0.98 and 1.56 crores respectively.

OTHER REHABILITATION MEASURES

16. The Government have also endeavoured to assist displaced artisans, business and professional men by granting them small loans upto Rs. 5,000 each. The amounts already advanced and proposed to be advanced in the next two years are shown below :

	(Rupees crores)		
	Up to March 1952	1952-53	1953-54
Displaced persons from West Pakistan	10.38	0.50	0.50
Displaced persons from East Pakistan.	4.24	2.86	2.86

Altogether, 1,58,000 displaced persons from West Pakistan and 44,000 from East Pakistan had received loans upto the end of March, 1952, and it is estimated that about 15,300 and 11,500 families will receive loans in 1952-53 and 1953-54 respectively. Many of the displaced persons who have received loans from the Government have also filed claims under the Displaced Persons Claims Act, 1950, and most of such claims have already been verified. As a prelude to the grant of such compensation as may be possible on the basis of these claims, it has been decided that the recovery of a loan from a borrower may be postponed up to one-tenth of the total value of his verified claim. To ensure better use of sums advanced by the Government, it has now been decided that hereafter such loans will be given only to displaced persons who have either received technical and vocational training under any of the schemes of the Government and wish to set up industry of their own or who have settled in the new townships.

17. For the larger businesses, loans are advanced to displaced persons by a special agency set up by the Government, namely, the Rehabilitation Finance Administration. Upto the 31st March, 1952, the Administration had sanctioned Rs. 8.25 crores in favour of 9,621 persons, of which Rs. 4.17 crores were actually disbursed. During 1952-53 the Administration expects to disburse Rs. 2.05 crores and during 1953-54 Rs. 3 crores.

18. Financial assistance on this scale has helped to bring back into activity about 27,000 evacuee shops and 2,000 evacuee industrial establishments which have been allotted to suitable displaced persons. Apart from this, 28,000 new shops and several new markets have been built in various towns. Industries are being developed in the new townships in order to provide further scope for employment and for individual enterprise.

19. There are 74,000 displaced persons—about 38,000 from West Pakistan and about 36,000 from East Pakistan—who are being looked after by the Government as a permanent measure. They consist of destitute, old and infirm persons and their dependents and unattached women and their children. The majority of them are being maintained and looked after in Homes or infirmaries specially established for them. It is proposed that eventually the Government will not, save in exceptional cases, look after and maintain anyone outside a Home or an Infirmary. In such Homes and Infirmaries work and training are provided to the old and infirm and to women according to their physical condition and aptitude. Education is given to the children. Some of the Homes have been entrusted to non-official organisations with a view to securing the largest measure of co-operation from the public. Wellknown institutions—the Kasturba Gandhi National Memorial Trust, the Trust for Sindhi Women and Children, the Arya Pradeshik Pratinidhi Sabha, the Rama Krishna Mission and others—are assisting the Government in the field of rehabilitation. A Central Advisory Board has been set up to advise the Government on all matters pertaining to the well-being of displaced persons described in this paragraph.

20. There were numerous displaced persons who depended upon their income from immovable property in West Pakistan and who had no means of livelihood in India and who, at the same time, by reason of old age, infirmity and other causes were unable to make a living for themselves. It was decided, as a temporary measure, to grant them maintenance allowances according to a prescribed scale, subject to a maximum of Rs. 100/- per month. Under this scheme, allowances are being given to 16,000 persons every month and so far Rs. 50 lakhs have been spent on such allowances. The scheme is likely to continue until such time as compensation is awarded to displaced persons for the immovable property they have left behind in West Pakistan.

21. A special Board has been set up for the rehabilitation of displaced Harijans and under the aegis of this Board employment has been found for about 8,800 displaced Harijans and accommodation in urban areas to the extent of 1123 houses and tenements. The Board has also helped 16,259 Harijan families in the matter of allotment of land and rural loans and provided 2,403 huts in the rural areas.

EXPENDITURE ON REHABILITATION

22. Up to the 31st March, 1952 the Government had incurred a total expenditure of Rs. 90.54 crores on the rehabilitation—as distinct from relief—of displaced persons. Rs. 27.81 crores are proposed to be spent during 1952-53 and Rs. 28.00 crores

during 1953-54. The table below gives the rehabilitation expenditure during the three years from 1951-52 to 1953-54 :—

	(Rupees crores)			
	1951-52	1952-53	1953-54	Total
Rural resettlement	3.88	4.04	2.80	10.72
Urban housing,	16.11	14.34	12.00	42.45
Urban loans (other than R.F.A.)	2.42	3.37	3.50	9.29
Loans by Rehabilitation Finance Administration	1.88	2.05	3.00	6.93
Technical training, education and other schemes	4.88	4.01	6.70	15.59
TOTAL	29.17	27.81	28.00	84.98

23. It is hoped that the bulk of the problem of rehabilitation of displaced persons from West Pakistan will be over by the end of 1953-54. Besides meeting commitments already accepted, only a few outstanding matters will need attention. For this purpose Rs. 6.20 crores will be required as shown below :—

	(Rupees crores)		
	1954-55	1955-56	Total: 1954-56
Housing.	4.00	..	4.00
Urban loans	0.50	0.50	1.00
Vocational and technical training	0.25	0.25	.50
Education	0.35	0.35	.70
TOTAL	5.10	1.10	6.20

24. The situation in the Eastern States, on the other hand, fluctuates fitfully and it is not possible to forecast the likely expenditure on displaced persons from East Pakistan beyond 1953-54. If the conditions remain normal, the present scale of annual expenditure which is of the order of about Rs. 11 crores (this is approximately the average of the estimated expenditure for 1952-53 and 1953-54) will have to be maintained. If conditions in East Pakistan worsen, the magnitude of the problem and therefore of the effort, will be correspondingly greater.

COMPENSATION FOR DISPLACED PERSONS

25. There has been so far no agreement between India and Pakistan on the disposal of evacuee property in the two countries. Owing to the urgency of the problem of rehabilitation and the fact that evacuee properties, particularly in urban areas, tend to deteriorate, certain steps in the direction of giving a measure of compensation to displaced persons have been taken. The quasi-permanent allotment of land in the Punjab and Pepsu has already been described. In other parts of India, the problem of giving some kind of compensation for the agricultural lands left behind by land holders of Sind, N.-W.F.P., Bahawalpur and Baluchistan still remains

to be tackled. The problem of urban properties is more complicated. In framing any scheme for their distribution it is important not to cause any large-scale dislocation. A large proportion of displaced persons from West Pakistan have now established themselves in larger or smaller measure in places where they have been living and if they are dislocated they will have to be found a new habitation as also new means of livelihood. Many urban properties are in the occupation of displaced persons who have no claims to compensation. Tentative proposals for the disposal of evacuee properties and grant of compensation have been recently worked out, but final decisions have not yet been taken.

REHABILITATION AND DEVELOPMENT

26. The rehabilitation of 7·5 million displaced persons presents numerous special problems but viewed broadly, it has to be regarded as an essential aspect of the development of the economy of the country as a whole. The expansion of the national economy by itself provides numerous opportunities for the rehabilitation of displaced persons possessing initiative and enterprise. The programme of rehabilitation is an integral part of the Five Year Plan, although it necessarily has to be kept under constant review, in particular, for meeting the exigencies of the changing situation in respect of displaced persons from East Pakistan.

CHAPTER XXXIX

EMPLOYMENT

THE PROBLEM of finding employment for all the able-bodied persons willing to work is a problem common to all countries—advanced as well as industrially backward,— although the causes and the extent of such unemployment may differ from country to country. Three main types of unemployment, distinguished according to causes, are : (1) unemployment arising from deficiency in aggregate demand ; (2) unemployment arising from shortage of capital equipment or other complementary resources; and (3) frictional unemployment. The first type is mainly cyclical in character and has been recurring in all advanced countries from time to time. The second is found mainly in under-developed countries, while the third may occur in any type of economy. The goal of social policy in all countries, especially in the advanced ones, has been to achieve full employment by directing investments along certain channels chiefly and by encouraging capital formation.

2. In India, in common with other under-developed countries, production is carried on with insufficient amount of real capital per head of the population. In almost all processes of production and distribution, the techniques are relatively backward leading to various forms of unemployment, seasonal unemployment in agriculture, and disguised or even manifest unemployment in certain industries and services. It, perhaps, appears strange that an under-developed economy, in which there is shortage of goods and services, should at the same time have insufficient employment opportunities, resulting in a surplus labour force. The consequent social and economic injury cannot be exaggerated. The problem is one of devising ways and means of utilising the labour power for productive purposes so as to increase the volume of goods and services available in the country and to raise living standards all round. In formulating a solution, however, the basic fact of the shortage of land and capital equipment has always to be kept in view.

3. To assess the magnitude of the problem in quantitative terms with the existing data on the subject is an almost impossible task. There have been no attempts so far for collecting statistical material on employment and unemployment ; the only published figures at present available are the registrations and placements of employment exchanges. These figures cannot, however, give an idea of the total volume of unemployment. Firstly, employment exchanges are confined to industrial towns and the figures of registrations and placements which they compile are restricted mostly to the industrial and commercial sector. Secondly, even in the industrial sector, there is neither compulsion for the unemployed to register with the exchanges, nor is there any obligation on the part of the employer to recruit labour only through these exchanges. Even the information regarding unemployment among the industrial workers is thus inadequate. Thirdly, in the nature of the case, employment exchange statistics cannot indicate the amount of disguised unemployment which is otherwise

believed to exist. This means that the extent to which qualified persons have to accept work which does not give them the income which persons with similar qualifications get elsewhere cannot be assessed from these data. There is also to some extent registration of persons who are already in employment and who desire to seek better jobs. This tendency is reported to exist in the more qualified section of registrants, but to the extent a region maintains these persons on the register of employment seekers, there is an over-estimate of the number unemployed. In spite of these serious limitations, the following table containing occupational distribution of the applicants on the live register of the employment exchanges, does, to some extent, confirm the popular belief that unemployment is on the increase. This increase is mostly among the unskilled and clerical categories:—

Occupational Distribution of Applicants on Live Register

Month	Number on live register of applicants for employment			
	Technical	Clerical	Unskilled	Total
Dec. 1947 . . .	42,194	44,468	84,942	1,71,604
Dec. 1948 . . .	35,012	62,320	86,546	1,83,878
Dec. 1949 . . .	41,115	63,519	1,27,676	2,32,310
Dec. 1950 . . .	45,623	77,745	1,64,108	2,87,476
Dec. 1951 . . .	41,469	85,057	1,62,445	2,88,971
March 1952 . . .	43,947	88,566	1,68,682	3,01,195
June 1952 . . .	47,868	1,10,920	1,76,864	3,35,652
Oct. 1952 . . .	49,879	1,20,221	1,94,579	3,64,679

4. In this country the problem of unemployment and under-employment seems to have been there for a long time. Its awareness is manifest in the fact that the nationalist movement in the earlier decades of this century laid a great emphasis on propagating the 'swadeshi' idea and the promotion of khadi and other village industries. The two wars to some extent obscured the issue during their duration and for a short period thereafter. The main factors which have aggravated the problem are the following :—

- (a) the rapid growth of population ;
- (b) the disappearance of the old rural industries which provided part time employment to a large number of persons in the rural areas ;
- (c) inadequate development of the non-agricultural sector from the point of view of employment (in spite of the considerable development during the last forty years, the shift of occupation from agricultural to non-agricultural sector since 1911 is only about 3%) ;
- (d) the large displacement of population as a result of partition.

5. One of the objects of the Plan is to increase employment opportunities and to raise the standard of living of the masses. Among the measures intended to be taken to tackle the problem of unemployment, foremost consideration is given to the rural sector on account of the magnitude and seriousness of the problem there. Moreover, offer of better

employment opportunities in the rural sector will have a salutary effect on the unemployment situation in the urban sector. The extent of unemployment in rural areas is, however, difficult to estimate. Some authorities put the figure at 30% ; but in addition to this, there is chronic under-employment. The quantitative estimates of this are even more difficult to work out. The reports of the Agricultural Labour Enquiry of the Government of India when published may throw some light on this subject.

6. Of the various measures proposed to be taken in the Plan to reduce the incidence of rural unemployment mention may be made of the major and minor irrigation works. These are expected to irrigate over 19 million acres. There are large scale land reclamation schemes which will, to some extent, help to relieve the pressure on the existing land resources. The large-scale unemployment and under-employment in rural areas can, however, be tackled only by providing the village community with other avenues of employment in addition to agriculture. The revival and development of rural industries have therefore found a central place in the rural development programmes. These industries have been considered both economically and socially desirable because the requirements of capital and skill are low. For the same amount of capital investment, these industries provide more employment than large scale industries. The Plan has, therefore, made provision for development of 12 village industries. The experience gained as a result of the development of these industries should be valuable in reviving and developing other village industries. Equally important is the revival of old handicrafts, the principal feature of which is skilled craftsmanship. The Plan makes various suggestions for the rehabilitation of these handicrafts. The financial provision for village industries and handicrafts for the period of the Plan is Rs. 15 crores. The cess proposed to be levied on large-scale industries to provide finance for the development of small scale industries will encourage the starting of more small scale industries and thus provide additional employment. Two other steps, which might help in reducing the pressure on employment in rural areas, are : (a) the extension of mixed farming and (b) the undertaking of public work programmes in slack agricultural seasons. The possibilities of these measures will be investigated.

7. Unemployment or under-employment is not confined to the rural sector ; it also exists in the urban centres. The increasing pressure on land has forced a large number of able-bodied persons to go to towns and cities in search of employment. They are mostly without much education and possess but little technical skill. There is, therefore, keen competition for unskilled jobs in factories, and in a number of small occupations ; the tertiary sector, especially the domestic service, absorbs also a good deal of this labour. Hotels, restaurants, stations and other public places are other sources of employment. Most of the occupations are generally overstaffed and the wages paid consequently are extremely low. The problem has to some extent been aggravated after the end of the war due to the difficulties faced by a number of small-scale industries, which came to be started during war-time on account of the ceasing of imports. Even industries like jari weaving, power-looms etc. which have existed for a long time have been encountering difficulties of one type or the other. These industries occupy the same place in urban centres as village industries do in rural areas. The solution of this unemployment problem lies mainly in the contemplated expansion of existing

large-scale industries and the starting of new ones. Along with this, suggestions are made in the Plan to save the existing small-scale industries and also to encourage the starting of similar new industries, especially those industries which can serve as complementary to large-scale industries. The provision made for small-scale industries in the Plan has to be viewed in this light.

8. The question has frequently been raised as to what would be the quantitative effect of the plan on employment. For this purpose, on the one side, information would be necessary on the estimates of available population for gainful occupation in various age groups, and on the other, on the expected volume of employment in different economic activities in the country, primary, secondary, and tertiary. Fairly reliable statistics of employment are available only in respect of organised productive activities. In respect of unorganised processes of production and distribution such as, agriculture, forests, fishing, animal husbandry, small-scale industries, trade etc. the information can be had fully from Census Reports for the year of enumeration but there is no machinery to keep this information up-to-date. About unemployment, practically no data are available. It is also necessary to have estimates of the man-power requirements in all branches of economic activity. The absence of all these statistics makes it difficult to assess with any degree of accuracy the results of the plan on the employment situation. But this does not mean that attempts should not be made in the direction of estimating future employment trends, however imperfect such attempts may be. These imperfections have to be viewed against the background of physical and organisational difficulties and will help to build a clearer picture for future work of this kind. It is for this purpose that an attempt has been made to work out the effect of the Plan on employment in certain schemes of development. We recognise that the estimates given here are very rough approximations and may perhaps be wide of the mark. The assumptions made in every case, therefore, have been clearly stated.

(a) *Industry*—The estimates in case of some industries have been made on the basis of information collected through employers' organisations as regards the future labour requirements. But in majority of cases they have been worked out on the assumption that additional production will lead to proportionate rise in employment which may or may not be true in most of the cases because of so many other factors, *viz.*, idle labour engaged at the moment, revised man-machine ratio in view of the installation of new machinery, rationalisation schemes under contemplation and so on. The right approach to this problem, therefore, will be to call for the forecasts from the employers themselves and to test them in the light of objective standards, evolved after tripartite consultations (Government, employers and workers). Though the authenticity of this method is fully recognised, it has not been possible to get in touch with each and every employer and even in case of those industries where this has been possible, the estimates given by employers could not be tested because of the non-existence of any objective standards. The industries in case of which such estimates could be had are agricultural machinery, power alcohol, salt and one or two light engineering industries. No estimates have been possible in case of fertilizers, fine chemicals, pharmaceuticals, heavy chemicals, railway rolling stock and some of the rayon industries due to the non-availability of employment figures in the base year. Subject

to all these limitations it has been estimated that the additional employment in this sector will be of the order of 4 lakhs inclusive of additional employment offered in small-scale industries.

(b) *Major irrigation and power projects*—An expenditure of about Rs. 100 crores a year is contemplated under the Plan for the construction of major irrigation and power projects. Assuming that 20 per cent of this would be spent on wages (direct and indirect) and that worker's average earnings would be about Rs. 750 per annum (Rs. 2-8-0 per day for 300 days), the resulting employment will be about 2 1/2 lakhs annually for the period of the Plan.

(c) *Agriculture*—On completion of the irrigation projects, the additional area irrigated will be nearly 19 million acres. Mostly this will lead to fuller employment rather than additional employment. It is estimated, however, that 30 per cent of the area may be expected to require the attention of new hands. Taking an economic holding to be of the size of 4 acres per person employed, major irrigation schemes will provide additional employment to 14 lakh persons in 1955-56. Additional employment for 1 1/2 lakhs of persons annually will result from repairs to tanks etc. for minor irrigation schemes.

Apart from this, additional employment in agriculture will also result from land-reclamation schemes which will bring 7.4 million acres of new land under cultivation by 1955-56. Taking an economic holding of the size of 10 acres per cultivator in the case of such land the resultant employment will be for about 7 1/2 lakh persons. These estimates do not take into account the fuller employment accruing to under-employed agricultural population as a result of minor irrigation schemes and schemes of intensive cultivation and improved agriculture.

(d) *Minerals*—The policy advocated by the Commission regarding minerals relates to their conservation rather than their exploitation. The emphasis has been more on improved methods of mining and research and not on suggesting targets for increase in production. The additional production will be necessary only in case of iron ore to feed the iron and steel plants. This will lead to employment for 4,000 persons which may be considered negligible.

(e) *Building and construction*—The Plan makes provision for the construction of about 25,000 houses annually for industrial workers. It has been worked out that 600 man-days are required to build a house of the specifications recommended in the Plan. 50,000 workers of all categories will thus be annually employed on this project. In addition to this, 50,000 persons can be assumed to find employment in building activity in the private sector.

(f) *Roads*—Another major item of additional employment is roads. An expenditure of Rs. 20 crores a year is envisaged during the Plan period. Assuming that 60 per cent of this will go for wages and assuming the average annual wage per person at Rs. 600 a year (i.e., Rs. 2 per day, for 300 days) the additional annual employment will be for 2 lakhs of persons.

(g) *Cottage industries*—Considerable additional employment will result from cottage and small-scale industries. It has been estimated that development schemes in this sector will give additional employment to about 20 lakhs of persons and provide fuller employment to about 36 lakhs under-employed persons. Bulk of additional employment (*i.e.*, 18 lakhs) will result from cotton handloom industry.

(h) *Tertiary sector and local works*—The employment figures given above consider the sectors in which there is going to be direct investment and development. But the development of agriculture, industries and roads, major and minor irrigation projects, and the building and construction activities will lead to the development of the tertiary sector, *e.g.*, there will be more demand for transport, storage, banking and other kinds of services. This sector will, therefore, provide additional employment, although any estimate of such employment will be difficult to make. Similarly, there will be increased activity in regard to works undertaken by local bodies and therefore, more employment. The figures worked out have not taken into account this source of employment due to the difficulty of estimating the figures.

EMPLOYMENT AMONG THE EDUCATED

9. The problem of unemployment among the educated has not received due attention elsewhere in the report. It is, therefore, proposed to deal with it here in greater detail. The problem in its present form is not new. Between the two wars unemployment of the educated had assumed serious proportions everywhere including this country where perhaps it assumed a more acute form. The war, to some extent, helped in temporarily relieving this unemployment by providing opportunities of service in armed forces and in the expanded avenues of production and services which were dependent on the war. There was a time during the war and in the immediately post-war years when it was difficult to get persons of one's choice to man the production processes. After the end of the war and with the demobilization of armed personnel and large-scale retrenchment in industries producing materials for the armed forces, and the consequent retrenchment in Government, commercial and business houses, the problem has again come to the forefront. The awareness of Government of the situation is evident from the fact that simultaneously with demobilisation, training facilities were provided by Government for equipping the demobilised personnel for alternative employment. There was also some reservation of vacancies for such persons, but its result was to deny corresponding opportunities to fresh entrants. Partition of the country further aggravated the problem because of the preferences shown by Government to the displaced persons in the matter of employment. It is, therefore, necessary to seek a solution, not through the negative approach of relief to the unemployed, but with a positive approach for organising employment as a part of economic development.

10. Subject to the remarks made above regarding the employment exchange figures, the position of the educated unemployed as revealed by the employment exchanges over a period of five years, is shown by the following figures :

	Dec. 1947	Dec. 1948	Dec. 1949	Dec. 1950	Dec. 1951	Oct. 1952
Technical* .	42,194	35,012	41,115	45,623	41,469	49,879
Clerical .	44,468	62,320	63,519	77,745	85,057	120,221

*In the absence of a detailed classification, all the persons given under this head are regarded as educated.

The figures show that the unemployment among the technical personnel is smaller as compared with the clerical personnel and that while the number of unemployed technical persons has gone up a little over a period of 5 years, the number of persons seeking clerical posts has gone up considerably over the same period. As against this, the following figures obtained as a result of an *ad hoc* enquiry conducted by the Directorate General of Resettlement and Employment last year, illustrate the position of the employment opportunities for the technical and clerical personnel :—

	Number of vacancies made available by employers	Percentage of vacan- cies to applicants awaiting jobs
Technical	5,180	12.5
Clerical	3,212	3.8

This means that of every 100 unemployed technical persons, only about 12 persons could be provided with jobs, while in the case of clerical jobs the vacancies were only 4 for every 100 unemployed registrants. This indicates that, while the problem of unemployment amongst the technical personnel is serious enough, in the clerical cadres it is at least thrice as bad.

11. A recent investigation undertaken by the Employment Exchanges Organisation into the number of matriculates and graduates seeking employment assistance reveals that over a lakh of persons with such education were in search of employment through the exchanges. 14% of these were University graduates. Amongst the persons with University degrees the largest number of employment seekers was of graduates in subjects other than engineering and medicine. Even these latter claim nearly 800 graduate registrants. This is a fairly large number in view of the fact that such personnel has been reported to be in short supply in the country. In these categories, therefore, unemployment seems to be either structural or resulting out of distaste for mobility. Another finding of this investigation was that the unemployment among graduates was mostly in non-technical lines. This reinforces the conclusions reached by the Scientific Man-power Committee.

12. The data discussed above have obviously their limitations. One thing, however, is clear that the unemployment in this class is on the increase and suitable measures appear to be necessary. The First Five Year Plan lays emphasis on increasing agricultural production and at the same time creating a base for future industrial expansion. This limits the immediate expansion of employment opportunities for the educated unemployed. It is only when a more rapid expansion of the industrial sector than is envisaged in the present Plan takes place that there will be a possibility of increasing avenues of employment for the educated class. As a matter of fact, the experience of other countries shows that “ although the expansion rate of the manual labour force employed by processing and production industries seems as a whole to have slackened to a great extent as a result of the concentration and extension of undertakings, improvements in technique, mechanization, and the scientific organization of labour, these same factors nevertheless give rise to a considerable increase both in the administration, financial, supervisory and marketing services and also in the preparation, organization, co-ordination and supervision of the processes assigned to

manual workers. An increasingly important place is also being reserved for research and laboratory work. All these manifold tasks involving increasing specialization, are carried out by commercial and office workers, supervisors, technicians and managerial grades of staff of every kind, *i.e.*, by non-manual workers ". These are no doubt long-term solutions but some immediate steps are necessary to deal with the problem. It seems necessary that the plans for education, especially in the post-primary stages, will have to be so framed that our future requirements will not suffer for want of structural adjustments. In this connection we recommend that the suggestions made by the Scientific Man-power Committee for overcoming shortages in certain technical lines should be given effect to, if necessary, by reassessing our requirements in the light of changes that have taken place since 1947.

13. In addition, we suggest the following short-time remedies :

(a) We have observed that there is some unemployment even among technical personnel, *e.g.*, engineers and doctors. This may be due to unattractive service conditions of certain posts and concentration in large cities and towns. It is, therefore, necessary to take measures to remedy this situation. It has to be seen that the pay offered is consistent with the cost of training of such personnel. Inducements, such as subsidising of private dispensaries, which form a part of some of the State plans, should be offered to doctors elsewhere also for settling down in villages.

(b) As the University Commission has observed the utility to employers of graduates with certain qualifications, *e.g.*, commerce, can be increased if the present purely theoretical knowledge imparted in colleges is supplemented by practical training. Its recommendation to impart such practical training either during college terms or during the periods of vacation deserves consideration.

(c) It has been seen that the problem of unemployment is very acute amongst those seeking clerical posts. Amongst the educated classes there is a disinclination for manual jobs. They prefer soft jobs to manual work even if it means waiting and smaller emoluments. The result is keen competition and large scale unemployment among new entrants. It is not only graduates and matriculates who compete for these posts, but even non-matriculates who are not qualified to hold these posts, try for these jobs, rather than accept manual jobs. On the other hand there is bound to be a big demand for manual work of a skilled or specialised kind. Educated persons should be persuaded to rid themselves of prejudice against manual employment and should be encouraged to receive sufficient training for manual jobs rather than cling to clerical jobs.* It is expected that the reorientation of the educational system with emphasis on basic education as proposed in the Plan will be a corrective factor in future to bring about the desired change.

(d) Certain special problems arise in case of young persons without experience as well as in case of older persons. In the former case employers are usually reluctant to engage persons without experience. This can be solved only with the help of employers by providing apprenticeship training to such persons. In case of the latter category of persons, such persons

*It is reported that an investigation was recently undertaken by a social scientist in Delhi. The main conclusion of this investigation seems to be "that the educated middle class generally has a very unrealistic conception of jobs for themselves".

may be precluded from public employment because of age bar, while private employers may prefer young persons to older people. It is only by reservation of certain number of posts in public service and by persuading private employers to engage such persons, especially those with family responsibilities, that the unemployment of such persons can be tackled.

(e) The better distribution of educated persons based on a choice of studies in accordance with the employment possibilities offered can be brought about only by collecting full and accurate information on present and future manpower requirements and reserves. It is, therefore, necessary to develop vocational counselling and guidance services and to see that greater use is made of them both by the young people intending to enter into service and also by the redundant workers who have already joined them.

14. All the above measures will no doubt bring a better distribution of educated labour force among different occupations helping to divert the people from occupations which are crowded to those where there is a shortage. In addition to these measures it is necessary that there should be a reduction in the number of job seekers. For bringing this about the following recommendations are made :

(a) It is quite conceivable that in the educated families there may be a desire for starting an independent establishment requiring small capital. A list will be made of small scale industries which could be started with different amounts of capital ranging from Rs. 500 to Rs. 5,000. Government should help them by advancing loans for initial capital and providing vocational training facilities. It should be a condition that the major portion of the fund required should be invested by the applicants for such loans. In such cases help should also be rendered for procuring raw materials and for disposal of the finished goods. The principle of co-operation in reference to such activities should be encouraged. Care should, however, be taken that such funds will not go for investment in distributive trades. What is required in short is the Extension to the educated unemployed of a scheme envisaged for assisting the displaced persons.

(b) Trading Estates in the United Kingdom provide factory sites or built up factory premises, with such facilities as transport and supply of electricity, water and gas laid on, to small amateur manufacturers on a rental basis. These facilities, which individuals could not have been able to provide except at very high cost have made possible the establishment of small and medium sized factories in selected areas. In the U.K. the Government took initiative in encouraging private capital to provide building up these estates after the great depression to reduce unemployment and to bring about better distribution of industries. While the objective of dispersal of industries is only a long-term process, the idea of trading estates can be experimented upon if it can help to some extent solve the unemployment problem of the educated classes. The built up factory accommodation with all the other ancillary facilities (like electricity, water, etc.) will provide the right type of incentive for persons who want to work hard and have small amounts to invest or can be given a measure of assistance. Some States have already taken initiative in the matter.

